CONSTRUCTION NEWS

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CONTENTS.

CONSTRUCTION NEWS:
- Railways 1
- Electric Railways 1
- Light and Power Plants 2
- Bridges 3
- Buildings 3
- Water Supply and Irrigation 5
- Sewerage 5
- Garbage Disposal 6
- Streets and Roads 6
- Manufacturing Plants 7
- Miscellaneous Contracts 8
- Contract Prices 9
- U. S. Possessions and Cuba 10
- Plans and Specifications on File 10
- List of Contracts Pending 10

INDUSTRIAL NOTES 10
ENGINEERING MATERIAL PRICES ..11-15
PROPOSALS 16

(List of Contracts Pending, and the list of Plans and Specifications on file at the office of Engineering News, will be found on the last page of this Supplement.)

RAILWAYS.

(*Denotes that this work is advertised in Engineering News.)

ATCHISON, TOPEKA & SANTA FE.—It is announced by the C. H. SHARP CONSTRUCTION, Temple, Tex., which has the contract for revising the grade and standardizing the division of the Santa Fe between Temple and Coleman, Tex., in order to make it ready for the heavy traffic that is expected to run over it when the cut-off line between Coleman and Texisco is finished, that the cost of this work will be approximately $1,394,805. This cut-off will give the transcontinental system of the Santa Fe a connection with the Gulf division and a direct route between the West and the port of Galveston.

ATHENS & TELLICO.—James B. Wright, Pres., Athens, Tenn., announces that $75,000 would be expended immediately for roadway improvements on this railway. He stated that trestles would be filled, grades revised and other work done to improve the trackage of the road. Plans are now being perfected for beginning this work at once, and it will be rushed during the summer period. It is probable that further appropriations will be made later on for additional changes in the physical condition of the road. The Athens & Tellico Ry. was recently purchased by the Louisville & Nashville R. R. Co., and it is maintained as a subsidiary company to the L. & N. corporation. We are officially advised that contract will be let about July 10. J. E. Willoughby, care of L. & N. R. R. Co., Louisville, Ky., is Ch. Engr.

BALTIMORE & OHIO.—Contract has been let to CURTIS, SHUMWAY & DEANE, Lynchburg, Va., and Portsmouth, Ohio, to construct the three miles of railroad from the B. & O. at a point near Worthington, W. Va., to the plant that is being constructed by the Four States Coal & Coke Co.

BLACK BAYOU RY.—Charter has been granted to the Black Bayou Ry. Co. in Texas. Company's principal office will be at Rossman, Cass County, Tex. Capital stock is $50,000. The proposed road will run from Myrtis, Caddo Parish, Louisiana, to the southwest corner of Cass County, Texas, beginning at the village of Rossman, thence into Marion County in a westerly direction to Mosely, about six miles east of Jefferson, a total distance of 22 miles. The incorporators are S. H. Chatten, F. H. Brown and C. C. Rossman, of Kansas City, Mo.; R. L. Trigg, S. M. Ragland, Robert Tucker, J. G. Hoffman and S. A. Collom, of Texarkana, Ark.; W. H. Welch and J. P. Cook, of Myrtis, La.

BUTTE & PLUMAS.—E. S. Dunbar, Ch. Engr., Oroville, Cal., announces that construction will be commenced at once. The first grading will begin at a point about half a mile east of Oroville. The road will be narrow-gage and the first section will be 35 miles long, from Oroville to Stanwood. From the latter place it will be extended as the cutting of the timber progresses. The new railway will open up some good country, but the idea of the builders is to make it a logging road. Noted on June 23.

CHERRYVALE, OKLAHOMA & TEXAS.—We are officially informed that the CONTINENTAL CONSTRUCTION CO., Independence, Kan., which is constructing the Cherryvale, Oklahoma and Texas Ry., wants bids on 5,500 tons of 70-lb. rails and 600 tons of 60-lb. rails, A. S. C. E. pattern; Bessemer steel and continuous rail joints; also standard angle bars; 1,700 kegs of 5½ × 9/16 spikes, and 400 kegs of Harvey grip track bolts; 150,000 untreated standard cross-ties, white post or burr oak, or 150,000 treated cross-ties from other woods than red oak family, loblolly, short-leaf, western yellow pine and other sap pines, spruce, hemlock and tamarack; also piling per specifications, standard. Delivery of materials to be commenced on or about Aug. 1, at Caney, Kan., and continued per order. All materials subject to inspection on arrival and payment made for same. J. H. Brewster, Pres. Noted on May 12.

CRYSTAL CITY & GARDENDALE.—The Secretary of State, Austin, Tex., has granted a charter to the Crystal City & Gardendale R. R. Co., with a capital stock of $45,000. The railroad is to run from the junction of the International & Great Northern at Gardendale, La Salle County, to Crystal City, Zavalla County, the line to extend through La Salle, Dimmit and Zavalla Counties, a total distance of 40 miles. The incorporators are: Mason Williams, H. L. Howard, S. P. Brundage, Eli Howell, Adolph Groos, W. F. McCaleb, M. H. Townsend and others, of San Antonio, Tex.; and A. R. Ponder, of Crystal City. Ernest Braker is Ch. Engr., Garden City, Tex.

ERIE R. R.—The city of Buffalo, N. Y., will sign a $1,000,000 contract with the Erie R. R. Co. for the elimination of a dozen railroad crossings on the Niagara Falls branch (Belt Line) of the railroad. Chas. H. Moore is Engr. Grade Crossings, New York.

GRAND TRUNK RY.—See Southern New England Ry.

LONG ISLAND R. R.—The agreement entered into on July 1 between the Board of Estimate and Apportionment, in behalf of the City of New York, and the Long Island R. R. Co., whereby the latter, in consideration of the payment of $450,000 by the city, agrees to abolish all grade crossings on that section of its Main Line and North Shore Division between Winfield Station and Woodside Ave., at the easterly extremity of Sunnyside Yard, and to elevate its Main Line and Montauk Division tracks through Richmond Hill and its Jamaica Yard to Washington St., in the Village of Jamaica and along Atlantic Ave. Division from the Morris Park Park Slope of Washington St. and on Locust Ave. to South St. This is an undertaking calling for an expenditure of millions of dollars and the railroad company will be called upon to pay about five-sixths of the cost, in addition to having already expended nearly $3,000,000 in the abolition of grade crossings on its Main Line and the Glendale cut-off, in the town of Newtown, entirely at its own expense. The proposed undertaking is one of the most important engineering works in connection with the abolition of grade crossings of the Long Island R. R. in the Borough of Queens, and will do away with 18 or 20 very dangerous points of intersection of the railroad and highways at the same level. It involves the excavation and transportation of over 2,000,000 cu. yds. of earth and gravel from the high hills south of Cold Springs Harbor Station to Jamaica, 21 miles to be used in embankment work through Jamaica section.

The Long Island R. R. Co. has practically completed the reconstruction of the North Shore Division into a double track road from Bayside to Great Neck and will begin work on electrifications and double tracking from Winfield Junction to Flushing, Whitestone, Malba and Whitestone Landing as soon as Governor Hughes signs the appropriation bill permitting the State to spend $200,000 for the elimination of grade crossings. This sum, together with an additional $200,000, to be contributed by the City of New York for the same purpose, will be placed at the disposal of the Public Service Commission, which, it is understood, will add the entire amount to the $400,000 which the Long Island R. R. Co. will contribute toward the removal of all grade crossings in Flushing. Between Flushing Creek and the Broadway station, Flushing, there are at present twelve grade crossings, the elimination of which will cost about $800,000. In Malba and several other home sections traversed by the North Shore Division grade crossings have been overcome by viaduct construction over thoroughfares. J. R. Savage is Ch. Engr., Jamaica, N. Y.

NEW YORK CENTRAL & HUDSON RIVER.—The Public Service Commission, Second District, Albany, N. Y., has given its approval to the cut-off and branches proposed by the New York Central through the city of Rome, N. Y. The Commission has also determined that all highway crossings involved shall be over the grade of the highway by structures the details of which have been approved by the city. The proposed branch line will be 3½ miles long and its building was made necessary by the construction of the barge canal through Rome. The plan adopted is of mutual advantage to the State and the railroad company. The new line will cost $1,784,000 and a new station $125,000. The proposed changes will cut the railroad distance at that point by about 1,000 ft., abolish many existing curves and will avoid the course of the barge canal. For damages sustained in changing its track the State has agreed to pay the company $818,000.

The New York Central & Hudson River R. R. Co. has given a contract to the SUNDSTROM & STRATTON CO., 90 West St., New York, for twelve miles of double tracking near Adams, N. Y.

NEW YORK, NEW HAVEN & HARTFORD.—Company has awarded the contract for the double tracking of the Highland Division, from Hawleysville to Botsford, Conn., a distance of about eight miles, and to cost about $150,000, to C. W. BLAKESLEE & SONS, of New Haven, Conn. There are about twelve grade crossings to be eliminated.

PACIFIC & IDAHO NORTHERN.—We are officially informed that contracts will be let at once for building an extension from Evergreen to New Meadows, Idaho, 15 miles. Surveys are made; right-of-way partly secured. E. M. Heigho is Pres., and Lee Highley is Ch. Engr., Weiser, Idaho. Noted on June 9.

SCIO, LACOMB & JORDAN VALLEY.—See Scio, Ore., item under Electric Railways.

SEABOARD AIR LINE.—Contract has been awarded to E. L. ANDERSON & CO., Dunnellon, Fla., for building an extension from Fruitville, Fla., north to Venice, 18 miles.

SOUTHERN NEW ENGLAND RY.—Howard G. Kelley, Ch. Engr. of the Grand Trunk Ry. System, Montreal, Que., advises us that location surveys for this proposed new line, from Palmer, Mass., to Providence, R. I., are now being made by the railway company's own engineers Fully noted on June 9.

UNION PACIFIC.—Contract for two additional miles of grading and clearing on the Willapa branch has been awarded to the ABERDEEN CONSTRUCTION CO., Aberdeen, Wash., which already has a contract for building 16½ miles. There is another small contract for a section 3¼ miles long, making twelve miles that will be built.

ELECTRIC RAILWAYS.

BOSTON, MASS.—Gov. Draper on June 16 signed the bill authorizing the Boston & Eastern Elec. R. R. Co. to construct a tunnel under Boston Harbor. The Boston & Eastern Elec. R. R. is to be a high-speed electric line, running over a private right-of-way. It will maintain stations in Boston, East Boston, Revere, Lynn, Salem, Peabody, Danvers and Beverly. Noted officially on May 12.

BROOKLYN, N. Y.—The Brooklyn & Jamaica Bay Ry. Co., which proposes to build a 3-mile line in Brooklyn, will commence construction when franchise is secured. It will connect with the Brooklyn Rapid Transit Co. Capital stock authorized, $100,000. Its repair shop will be located at its terminal, at Old Mill, Jamaica Bay. Horace J. Subers, 25 Broad St., New York, is Pres.; Nelson S. Easton, Vice-Pres. ,and Ogden R. Pell, 54 New St., New York, Secy. and Treas.; Frederick B. Langston, Engr. Headquarters: Temple Court, New York. Noted on June 9.

HORNELL, N. Y.—The Public Service Commission, Second District, Albany, N. Y., has authorized Hornell & Bath Interurban Ry. Co. to issue an additional $195,000 of bonds. The proceeds are to be used for building from Hornell, N. Y., east to Bath, 24 miles. C. Adsit, J. M. Finch, Hornell, and J. F. Turk, Hammondsport, are directors, as noted on Dec. 2, '09.

NEWARK, N. J.—Thomas N. McCarter, Pres. of the Public Service Corporation of New Jersey, has announced that his company had secured the controlling interest in the New Jersey & Hudson River Ry. & Ferry Co., of Edgewater, N. J. He also states his company had secured a large interest in the Morristown Gas Light Co.

McKEESPORT, PA.—An ordinance has been presented in Councils asking action for a traffic arrangement with the Second Ave. line of the Pittsburg Rys. Co. for a new line that will be built to reach a thickly populated district of the Monongahela Valley. The line will be operated between McKeesport and West Elizabeth, touching Glassport, Wilson and Clairton. The financial end of the project is being handled by the Freehold Real Estate Co., of Pittsburg, and the company back of the project is the Pittsburg, McKeesport & Westmoreland Ry. Co., which is now asking Councils for a franchise in Lincoln Way, intending to connect with the Second Ave. line at the intersection of that thoroughfare and Fifth Ave. R. W. Hervey is Secy. of the Pittsburg, McKeesport & Westmoreland Ry. Co., at West Newton, Pa.; Geo. D. Cook, 25 Broad St., New York, is Treas. Noted on Nov. 4, '09.

Application was made recently to McKeesport Councils by the Jefferson-Wilson Street Ry. Co. for a franchise to construct a street car line between McKeesport and West Elizabeth. The company is backed by the Freehold Real Estate Co., 334 Fourth Ave., Pittsburg.

JOHNSTOWN, PA.—The Tower City, Reiner City & Johnstown Street Ry. Co. has plans under way for starting work on this proposed 3-mile railway to connect Reiner City, Tower City and Johnstown. Company will operate four gasoline motor cars and will be operated as part of the Schuylkill & Dauphin Traction Co. Capital stock authorized, $100,000. Joseph W. Moyer, Pottsville, is Pres.; Edgar D. Rank, Williamstown, Secy. and Treas.; W. E. Harrington, St. James, Philadelphia, Gen. Mgr. and Ch. Engr.; W. T. Corbresller, Williamstown, Supt. and Pur. Agent. Company was recently chartered in Pennsylvania.

TARENTUM, PA.—The Tarentum, Brackenridge & Freeport Street Ry. Co. plans to complete preliminary arrangements soon and start work on this proposed interurban electric railway which is to be built through Allegheny County.

BALTIMORE, MD.—The Commissioners of Carroll County recently granted right-of-way to the Baltimore & Pennsylvania Ry. Co. for the construction of its tracks along the Reisterstown and Hanover turnpike. A charter was granted the company at the last session of the Legislature to build and operate an electric railway with Reisterstown as its southern terminal to its northern terminal in Pennsylvania. At Reisterstown the road will connect with the Emory Grove line of the United Rys. & Electric Co., of Baltimore; and in Pennsylvania it will connect with the Hanover and York Systems in that state at Intersection, above Melrose. By the construction and operation of this road Washington, Baltimore, York and Hanover will be joined by a chain of electric railways. John Pierce Bruns, 1209 Calvert Bldg., Baltimore, is Pres. of the company. He states that all the preliminary work on the plans for the road has about been finished and the actual construction will begin within the next few months. It is estimated by Mr. Bruns that the road will cost $600,000, and it has been capitalized at that amount. It is proposed to issue first mortgage 30-year 5% bonds to raise the necessary funds. The contract for the construction of the road has been already awarded to the MARYLAND CONSTRUCTION & DEVELOPING CO., of which Howard Tebbs, of Baltimore, is Vice-Pres. and financial agent. This company proposes to accept the bonds of the railway company in payment. Noted fully on May 5.

BURNSVILLE, W. VA.—The recently-incorporated Burnsville, Glenville & Parkersburg Traction Co. probable will let construction contracts soon when surveys are completed. The line will connect the places named in its title. L. W. Bartlett is Gen. Mgr., Buckhannon, W. Va. Noted on June 16.

MOBILE, ALA.—Within four years Scranton, Miss., and Mobile will be connected by an electric interurban line. The first step toward its construction was taken recently when the company promoting the new road secured a franchise to cover 12½ miles of the distance. Alabama and Mississippi capital exclusively will finance the building of the line and the promoters are ready to begin actual work on its construction at once, according to R. A. Roberts, Pres. of the Board of Supervisors of Jackson County, Scranton, Miss. William D. Bullard, of Scranton, is interested. The line will be about 30 miles in length.

HAMMOND, LA.—We are officially advised that the Hammond Interurban Ry. Co. will let contracts as soon as company can get ready for construction. Surveys are being made and right-of-way secured. The line will connect Hammond and Genesee, four miles. W. E. Libby, of Hammond, is Pres.; B. H. Brooks is Vice-Pres. Noted on June 9.

CHATTANOOGA, TENN.—The Board of Aldermen has granted a franchise to D. J. Duncan and associates for a new street railway.

MURRAY, KY.—We are officially advised that the Murray Traction Co. will let contracts about Sept. 1 for building this proposed railway. It will connect Murray and Calloway and will be 16 miles long. Surveys are made, right-of-way obtained and capital partly secured. Nat. Ryan is Pres., Murray.

COLUMBUS, OHIO.—The Fifth Ave. Ry. & Light Co., which was recently incorporated, has not yet completed its organization. It proposes to build a 7-mile railway in Columbus, and furnish power for lighting. Capital stock, $10,000. Headquarters, 35 West Fourth Ave., Columbus. Incorporators are A. C. Wolfe, E. W. Gantes, W. Cushing and J. W. Jennings, all of Columbus, as noted on June 9.

ZANESVILLE, OHIO.—H. D. Blodgett, Gen. Mgr. of the Zanesville & Meigs Valley Traction Co., Zanesville, informs us that the proposed line will be built by the company. It will run from Zanesville to Beverly, Ohio, through Meigs Creek Valley coal fields, 41 miles. Surveys are made and about 95% of right-of-way and franchises. C. T. Gale, R. F. D., Chandlersville, Ohio, is Pres. A. C. Harrington, Indianapolis, Ind., is Ch. Engr. Noted on Jan. 6.

DECATUR, ILL.—The Decatur Southern Traction Co. has made necessary arrangements and contracts will be let about Aug. 1 to build this line from Decatur, Ill., south through Macon and Assumption to Pana, about 30 miles. There will be a bridge over the Sangamon River. R. McCalman is Ch. Engr., 318 Citizens T. & T. Bldg., Decatur. Noted on Feb. 17.

DES MOINES, IOWA.—The work of securing subscriptions for the proposed Red Oak-Des Moines Interurban Ry. line which is to pass through Winterset and Greenfield, is rapidly progressing. W. L. Sonntag, of Evansville, Ind., and D. M. Dowd, of Des Moines, are the promoters.

BILLINGS, MONT.—We are officially informed that at a special election held June 20 the qualified electors of the city of Billings granted a 50-year franchise to the Eastern Montana Elec. Ry. Co. As officially noted on April 14, right-of-way will be secured upon completion of survey. Capital has been obtained. This railway will be 87¼ miles long, extending from Billings to Red Lodge, Mont. F. A. Kesselhuth is Ch. Engr., Billings. Daniel D. Gile is Vice-Pres., Room 1006, 27 William St., New York. Noted on Feb. 10.

ST. CHARLES, MO.—The St. Louis-Kansas City Electric Ry. Co., of St. Louis, has asked the Council for a franchise to build a railway over certain streets in St. Charles. Noted on April 28.

AMARILLO, TEX.—The proposed street railway, for which franchise was granted to N. A. Brown, of Dallas, will be two miles long, and will connect San Jacinto Heights with Polk St., Amarillo.

DALLAS, TEX.—The Trinity Valley Traction Co. announces that it is now operating under the direction of a board of trustees and has not yet incorporated. When preliminary arrangements have been completed a charter will be secured. Company plans to begin work on the proposed 120-mile railway next fall. It will connect Dallas, Waxahachie, Ennis, Corsicana and Palestine. Power stations will be built at Dallas and near Corsicana. Headquarters, 304 Scollard Bldg., Dallas. Capital stock is to be $3,000,000. J. V. Watkins, 304 Scollard Bldg., Dallas, is Pres. and Gen. Mgr.; J. J. Sears, Aledo, Vice-Pres.; W. W. Clopton, Corsicana, is Secy.

AUSTIN, TEX.—The Austin Electric Ry. Co. has decided not to extend its street railway system into South Austin, since a franchise has been granted to C. V. Burkhead, of San Antonio, to build a similar line, as noted on June 30.

GUTHRIE, OKLA.—State ownership of a system of interurban lines to compete with the steam railroads is proposed in initiative petitions being prepared by attorneys in Oklahoma City. Supported by the State Federation of Labor and Farmers' Union, the petitions are to be circulated through the state immediately. It is proposed that the right for the state to own and operate lines shall be incorporated in the constitution. Provisions are made for the creation of a State Board of Railway Construction and Transportation, and all employees shall work under a civil service system, according to press reports. It is further proposed that all control of the railroads be put up to the State Board and the question removed from politics and legislative control. Special attention is to be paid to the question of the feasibility of hauling children to the rural schools free of charge, whenever possible.

MUSKOGEE, OKLA.—We are officially advised that the Muskogee Transit Co., recently incorporated, has applied for a franchise from the city of Muskogee, but that it cannot be granted before the fall election. G. J. Barwick, 4931 McPherson Ave., St. Louis, Mo., is an incorporator. Tams Bixby is Pres., Muskogee. Noted on May 19.

WHITE SALMON, WASH.—It is announced that the Mount Adams Ry. Co. will commence construction on its proposed 40-mile electric railway in the fall. It will connect White Salmon, Bingen, Bristol, Pine Flat, Snowden, Timber Valley, Glenwood and probably Trout Lake and Husum. Power-house will be located near White Salmon and will have a capacity of 10,000 HP.; repair shops will be in White Salmon. Company will furnish power for lighting and for manufacturing purposes. Capital stock authorized, $50,000; bonds authorized, $800,000. Rudolph Lauterback, White Salmon, is Pres.; Tunis Wyers, Vice-Pres.; Theodore F. Shepler, Secy. and Gen. Mgr., and Hubert L. Simpson, Treas, White Salmon. Noted on Jan. 20.

SCIO, ORE.—We are officially advised that the Scio, Lacomb & Jordan Valley R. R. Co. has made preliminary survey for its proposed line from Munkers to Scio and up Thomas Creek, 15 miles. Right-of-way for three miles has been secured. Capital is wanted. A. G. Prill, Scio, is Pres. Motive power will be gasoline motors or steam. The railroad will tap a fine timber belt.

FRESNO, CAL.—The Chamber of Commerce is interested in project to build an electric railway to connect Fresno, Coalinga and Monterey, Cal. Estimated cost, $4,000,000 to $5,000,000. Among those interested in this project are A. G. Metz and H. N. Bergine, of Monterey; A. B. Harris and A. B. Weller, of San Francisco, and George Chalmers and E. R. Shaw.

HANFORD, CAL.—Articles of incorporation of the Hanford & Summit Lake Ry. Co. have been filed. The capitalization of the road amounts to $500,000 and the principal place of business will be Hanford. The line will extend from Hanford through Grangeville and Hardwick into the Summit Lake region and will return through Lemoore and Armona. The road, including the loop and an extension to Laton, will be 15 miles long. Electricity will be the motive power used. Charles King Hardwick, J. O. Hickman and George C. Aydelott, of Hanford; Ralph W. Heins, of Santa Cruz, and Clifford McClellan, of San Francisco, are the directors of the company and have subscribed $15,000 of the stock.

URUGUAY.—Hon. Edwin V. Morgan, American Minister at Montevideo, states that the commission of the House of Representatives has reported favorably on a bill to permit a concessionaire (name on file at Bureau of Manufactures, Dept. of Commerce and Labor, Washington, D. C.), to construct a rapid express electric railway between Montevideo and Colonia, on the Plate River opposite Buenos Aires, and a canal (the Zabala) for navigation, irrigation, motive power, and water supply, which shall start from the river Santa Lucia and shall terminate in the Bay of Montevideo. The state guarantees for 15 years 5% of the cost of the canal, which is fixed at 11,000,000 pesos (peso, gold = $1.034).

LIGHT AND POWER PLANTS.

(** denotes that this work is advertised in Engineering News.*)

FORT McKINLEY (Portland Post-Office), Me.—The LORD ELECTRIC CO., 213 West 40th St., New York, has been awarded the contract for the construction of and remodeling the electric lighting system at Fort McKinley, at $4,698. List of bidders noted on June 16.

MILLBURY, MASS.—The Committee on Lighting has awarded contract to the MILLBURY ELECTRIC CO. for street lighting for ten years. The town is to be lighted by tungsten lamps instead of arc and incandescent lamps as at present and the company agrees to furnish 60-c.p. tungsten lamps at $16.50 each per year; 40-c.p. lamps at $14.50 each, and 32-c.p. at $13.50 per lamp per year. The cost of street lighting will be about $3,000 per year. A. G. Sias is Supt., Uxbridge.

FITCHBURG, MASS.—Contract has been awarded by the Crocker-Burbank Co. to the CONNECTICUT RIVER TRANSMISSION CO. for furnishing electricity to operate all the paper mills of the Crocker-Burbank Co. here. Electricity generated at the plant on the Connecticut River, at Vernon, Vt., is used in two of the paper mills of the Crocker-Burbank Co. Work will commence at once on the construction of substations to furnish electricity to the mills that are not close to the line which runs from Vernon to the Beech St. substation to Cleghorn. Seven mills now in operation and one to be erected within a year are included in the contract.

*WESTFIELD, MASS.—We are officially advised that bids for building underground electrical conduits in Westfield were received by the Committee on Repaving Elm St. and Park Sq. at the office of the Town Clerk, on June 29. The work includes the building of about 9,000 ft. of conduit of various sizes from one to twelve ducts together with the necessary manholes and other appurtenances. The bids follow: F. L. Allen, Worcester, Mass., $14,717. Safety Insulated Wire & Cable Co., 114 Liberty St., $11,732. F. T. Ley & Co., Springfield, Mass., $14,381. McGunigle & Tounge, Roslindale, Mass., $14,730. Oren E. Parks is Town Engr.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., July 18, (2) for repairs, alterations and additions to the electric equipment in Public Schools Nos. 16 and 58, Boro. of Brooklyn; (6) for repairs, alterations and additions to the electric equipment in Public School No. 108, Linwood St. and Arlington Ave., Boro. of Brooklyn; (8) for repairs, alterations and additions to the electric equipment of Public School No. 2, Third Ave. and 169th St., Boro. of The Bronx, and Public School No. 157, St. Nicholas Ave. and 127th St., Boro. of Manhattan; (9) for new water main, electric pump, etc., at Public Schol No. 62, on Hester, Essex and Norfolk Sts., Boro. of Manhattan; (11) for repairs, alterations and additions to the electric equipment in Public School No. 147, Henry, Orchard and Gouverneur Sts., Boro. of Manhattan; (12) for repairs to heating and ventilating apparatus of Public School No. 34, Springfield Road and Hollis Ave., Queens, Borough of Queens.

LONG ISLAND CITY (L. I.), N. Y.—Bids were received as follows on June 29 by the Borough President for all material and labor required for furnishing and installing electric combination and gas lighting fixtures in the Queens County court-house, Boro. of Queens: Mitchell-Vance Co., $6,886; The Enos Co., $6,898; Reading Electric Co., $6,000; Caltes-Peace Co., $6,290.

CORTLAND, N. Y.—See item under Streets and Roads.

CORTLAND, N. Y.—Bids will be received by Andrew S. Draper, Comr. of Education, State Capitol, Albany, until July 12 for improvements to the State Normal School, including electric wiring and fixtures, and improvements to the water supply.

EPHRATAH, N. Y.—The Fulton County Gas & Electric Co., of Gloversville, N. Y., has been authorized by the Public Service Commission, Second District, to acquire from the Mohawk Hydroelectric Co. the franchise granted in May, 1910, in Ephratah, and is also authorized to construct and operate an electric light plant here.

TRENTON, N. J.—Bids will be received at the office of the City Building Commission, Trenton, until July 7, for furnishing and installing lighting fixtures ready for use in the new municipal building, Trenton. Ferdinand W. Roebling is interested.

HOBOKEN, N. J.—The City Council has awarded contract to the PUBLIC SERVICE CORPORATION OF NEW JERSEY for lighting the streets of the city for five years, at $75 per lamp per year. Bids were submitted on a 1 and 3-year basis at $85 each per year. H. D. King is Supt., Hoboken.

ALLENTOWN, PA.—Contract for the power plant and disposal plant at the County Home was awarded on June 27 by the County Commissioners to GEORGE H. HARDNER, at $49,000.

WAYNESBORO, PA.—The Chambersboro, Greencastle & Waynesboro St. Ry. Co. is making preparations for the construction of a substation at Pen Mar, Pa. A 500-KW. Allis-Chalmers turbine is being installed at its power-house here.

ROMNEY, MD.—A charter has been granted to the South Branch Power Co., of Martinsburg, to construct a water-power plant on the south branch of the Potomac River near Romney and to sell such electric power. The capital stock is $5,000 and the incorporators are: John W. Dodd, J. O. Henson, William Downey and Gray Silver, of Martinsburg, and George H. Johnson, of Romney. This company is designed to develop the power on Mr. Dodd's property alongside the river in Hampshire County.

WASHINGTON, D. C.—The United States Navy Department has awarded to ALLIS-CHALMERS CO. contract for motors and switchboards for the Indian Head Proving Grounds, Md. There are 25 induction motors varying in size from 5 HP. to 100 HP. and eight panels.

WASHINGTON, D. C.—Bids are asked by James Knox Taylor, Supervising Arch., Treasury Dept., Washington, until 3 p. m., July 20, for furnishing and installing lighting fixtures in the U. S. Buildings at Boulder, Colo.; Clarinda, Iowa; Fayetteville, Ark.; Kearney, Neb.; Logan, Utah; Marion, Ohio; Mayfield, Ky.; Pittsburg, Kan.; Shenandoah, Iowa, and Newark, N. J.

LURAY, VA.—We are officially advised that bids were received by the Town Council on June 27, for lighting streets for a period of three years, with the privilege of five years, at option of Council, on arc lights, 4 and 6 ampere, and on incandescent lights, 16 and 32 c. p. The SHENANDOAH RIVER LIGHT & POWER CO., of Luray, was awarded contract at the following prices: 6 ampere lights, arc, $30 per annum; 4 ampere, $20; 16 c. p. incandescent, $4.50; 32 c. p., $8.33; 50 c. p., $12.50. B. F. Batman is Recdr.

RICHMOND, VA.—The Common Council has passed an ordinance appropriating $20,000 for ornamental lighting of Broad St., from 12th to Jefferson Sts.

FLORENCE, S. C.—The Florence Electric & Utility Co. has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a 150-KW., 2-phase, 60-cycle, 2,300-volt, 900 r.p.m., belted alternator, together with a 5-KW. exciter.

FLORENCE, S. C.—The Florence Electric & Utility Co., has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a 150-KW., 2-phase, 60-cycle, 2,300-volt, 900-r.p.m., belted alternator, together with a 5-KW. exciter. This equipment will be used to supply Florence with light and Power.

ATLANTA, GA.—The Atlanta Hydroelectric Power Co., it is reported, will construct a 700-ft. dam across the Tugaloo River to develop 25,000 HP.

BIRMINGHAM, ALA.—The new plant of the Birmingham Rail & Locomotive Works, now under construction, will be equipped for electrical operation. Haskins Williams is Pres.

BESSEMER, ALA.—The Birmingham Water & Electric Power Co., of Birmingham, Ala., is contemplating the construction of a dam across the Warrior River, and proposes to furnish electricity and water here. The company has applied to the City Council for a franchise to furnish water and electricity.

CHATTANOOGA, TENN.—JACOBS & DAVIES, New York, have secured contract to complete the Hale's Bar lock, dam and power plant for the Chattanooga & Tenessee River Power Co.

LORAIN, OHIO.—The Baltimore & Ohio Ry. has awarded contract for the power equipment for its new ore dock under construction here to the ALLIS-CHALMERS CO., of Milwaukee, Wis. The power will be furnished by a 300-KW. synchronous motor generator set.

CINCINNATI, OHIO.—Contracts for the power-house for the University of Cincinnati, it is reported, have been awarded as follows: Excavation and grading, FRANK G. HOLTMAN; stone masonry and plain concrete footings, MINERS DOELLING; cement work, BILLINGS ART STONE CO.; reinforced concrete, R. AUFDERHEIDE; marble, JOHN MOELLER; sheet metal work and roofing, E. GREIWE & BRO.; painting and glazing, BELTLING BROS. CO.; brick work, JOSEPH McDERMOTT, total cost, $30,360. Equipment: Tunnels, R. AUFDERHEIDE, $22,000; power, piping and distribution, PECK-WILLIAMSON CO., $25,315; pipe covering, WIRTHLIN-SCALLEN CO., $2,774; electric wiring and distribution, SCANLAN ELECTRICAL CO., $9,537; plumbing, JAMES J. DOWD, $1,190.

YOUNGSTOWN, OHIO.—The report of David Miles, of the Street Lighting Committee favoring the construction of a plant at the water-works for auxiliary lighting has been accepted. Estimated cost, $25,000.

AKRON, OHIO.—The American Hydraulic Engineering Co., New York and Chicago, proposes to harness the Cuyahoga River at the gorge and construct a large power plant. The plans provide for a dam 160 ft. high at Cuyahoga Falls. F. C. Whipple is Ch. Engr.

AKRON, OHIO.—The Northern Ohio Traction & Light Co., of Akron, will soon start the erection of a $2,000,000 power-house here. Plans for the plant are now being prepared and bids will be asked in a few weeks.

BEDFORD, IND.—The Bedford Power Co. will construct a power plant and dam. Estimated cost, about $500,000. Horace C. Stilwell, of Anderson, Ind., is interested.

OWOSSO, MICH.—The Reliance Motor Co. has prepared plans for the erection of a new factory here. The main building will be 384 × 579 ft., two stories high. A 2,000-HP. power plant will be installed in connection with the new factory.

STREATOR, ILL.—The Illinois Valley Gas & Electric Co., a subsidiary of the Commonwealth Edison Co., of Chicago, and the Economy Light & Power Co., of Joliet, has secured a 50-year franchise to furnish gas and electricity here.

STRAWBERRY POINT, IOWA.—Bids will be received by the town until 4 p. m., July 19, for a 90-HP. gas producer and engine and a 50-KW., 3-wire generator, pole line and wiring and brick building. A. R. Cole is Town Clk. O. Claussen is Consult. Engr., German-American Bank Bldg., St. Paul, Minn.

VIRGINIA, MINN.—Contract for installing the ornamental illuminatiog system for Chestnut St. has been awarded to the LAWRENCE GOODSPEED ELECTRIC CO., at $5,498.

ST. PAUL, MINN.—McGill, Warner & Co., of St. Paul, Minn., are making preparations for the installation of electrical machinery, including a 75-KW., direct-current, engine-driven generator.

WALTHILL, NEB.—Plans are being prepared for the construction of an electric light plant and water-works system here. Estimated cost, $20,000.

FORT MACKENZIE, WYO.—The F. E. NEWBERRY ELECTRIC CO., St. Louis, Mo., has received contract at $6,308 for remodeling the street lighting system and building a transformer substation here.

FORT MISSOULA, MONT.—Contracts have been awarded for the construction of an electric light system here, as follows: For fixtures for buildings and distributing system to F. E. NEWBERRY ELECTRIC CO., of St. Louis, Mo., at $4,284 and $9,988 respectively; for switchboard and apparatus to the WESTINGHOUSE ELECTRIC & MFG. CO., at $2,052.

AUSTIN, TEX.—The Arkansas Natural Gas Co., of Wilmington, Del., having a capital stock of $6,500,000, on June 17, obtained a permit from the Secretary of State to do business in Texas. The company is developing the natural gas fields around Marshall, Tex., and Caddo, La., and will pipe the gas to a number of Texas towns and cities. It is announced the corporators are all Pittsburg, Pa., men, as follows: William Flynn, Joseph Guffey, A. B. Dolley, Jr., J. C. Trees, M. L. Denum[illegible] P. Whitcomb, George H. Flynn, H. [illegible]son, T. W. Barnsdale, Henry W. Dav[illegible]

WACO, TEX.—The Waco G[illegible] Electric Light Co. is preparing to doub[illegible] capacity of its plant including improve[illegible] to both electric and gas systems. E[illegible]ed cost, $25,000.

FORT SILL, OKLA.—Contra[illegible]ve been awarded as follows for the co[illegible]on and installation of an electric lig[illegible] power plant at Fort Sill: KRAUS[illegible] BRASS MFG. CO., fixtures for buildin[illegible] Mc-CAY ENGINEERING CO., 9[illegible] Lexington St., Baltimore, Md., pole [illegible]onstruction, $10,997; GENERAL EL[illegible]IC CO., Oklahoma City, transformers a[illegible] watt-meters, $2,645; RIDGWAY DYNA[illegible] & ENGINE CO., Ridgway, Pa., engin[illegible]l generators, $13,400; URBANER-ATW[illegible] HEATING CO., St. Louis, Mo., feed [illegible] heater etc., $2,540; steam piping, pum[illegible] $6,500; EVANS-ALMIRAL CO., New[illegible] traveling crane, $1,754; concrete [illegible] and foundations for mechanical equ[illegible] $2,647; boilers, $16,452; WEST[illegible]HOUSE ELECTRIC & MFG. CO., Balt[illegible] Md., switchboard, $3,863.

SEATTLE, WASH.—Bids will [illegible] received by C. B. Bagley, Clk. Bd. Pub. W[illegible] until 10 a. m., July 10, for the constru[illegible]n of a 30-in. steel stand-pipe for the Li[illegible]g Department, all in accordance with [illegible]ns and specifications filed in the office of [illegible] Board of Public Works. Stand-pipe sha[illegible] be delivered f. o. b. Seattle, Wash.

SEATTLE, WASH.—The City Co[illegible]il has passed an ordinance providing for [illegible]e installation of a system of cluster [illegible]ps on Stewart St., from First Ave. to [illegible]stlake Ave.; Virginia St., from the alley [illegible]tween Third Ave. and Fourth Ave.; Fou[illegible] Ave., from Pine St. to Virginia St.; Fifth [illegible]e. and Sixth Ave. each, from Westlake A[illegible] to Virginia St., in accordance with plans [illegible]repared by R. H. Thompson, City Engr.

LOS ANGELES, CAL.—The Board of Public Works has awarded contract to the LLEWELLYN IRON WORKS, of Los Angeles, for 188 ornamental electroliers at $15,463. The poles are to be erected and paid for by the residents and property owners on Pico St. from Maine Ave. to Vermont Ave. Noted on June 16.

BERKELEY, CAL.—The City Council has granted to the Great Western Power Co. a franchise for 35 years to construct and operate an electric system here, bids for which will be received until July 19. Under the terms of the franchise the City Council reserves the right to specify rates and to name the districts in which the wires shall be placed underground and the city is to have the privilege of taking over the entire holdings of the corporation at the expiration of the franchise on payment of an equable sum. Work will begin on construction of the system soon.

BUTTE VALLEY, CAL.—The Great Western Power Co. is having surveys made for canals, pipe lines, and water tunnels on the North Fork of the Feather River, near the mouth of Butte Creek, ten miles below Big Meadows, where it is reported that the electric generating plant of the Big Meadows project will be located. Investigations are also being made on the North Fork, near Meadow View, or Nevis, with a view of locating a site for a large storage reservoir dam.

BAKERSFIELD, CAL.—The Kern River Oilfields of California, Ltd., is preparing plans for the installation of an electric plant and for drilling of sufficient number of wells to increase the production to 350,000 barrels yearly. Estimated cost of the plant, $250,000.

SAN LEANDRO, CAL.—The Board of Trustees has granted to the People's Electric Light & Power Co. a franchise to construct and operate an electric light system here.

LONG BEACH, CAL.—The Long Beach Inner Harbor Co. has consolidated with the Edison Co. Plans are being considered for a new gas plant and receivers. Estimated cost, $400,000.

OAKLAND, CAL.—K. B. Miller, Consulting Engr., employed by the city to investigate the gas and electric lighting system, recommends that the present 220-440-volt alternating-current electric system now furnished by the Oakland Gas, Light & Heat Co. should be discontinued, and the standard 110-220-volt system, with grounded neutral, be adopted; that the street lighting system remain as at present for another year, at least, owing to the rapid progress now being made in the development of arc lamps and large unit incandescent lamps; and that the matter be investigated and reconsidered at the end of another year. He suggests in connection with the electrolier system of lighting that the present carbon lamps be replaced by multiple tungsten lamps having an efficiency of 1.25 watts per c. p., and that the city no longer consider the use of Welsbach gas mantels for illuminating the streets.

REDONDO BEACH, CAL.—The Pacific Light & Power Co. has awarded contract to A. STUTZER, of Santa Monica, Cal., for installing turbine, foundations, building condenser hot well, placing condenser pipes in street and encasing same in concrete, altering pier, building bulkhead, etc.

CHICO, CAL.—The Pacific Gas & Electric Co. has plans under consideration for the expenditure of about $50,000 for the extension and enlargement of its gas service in Chico and suburbs.

DOUGLAS, ARIZ.—Arrangements have been made for the Copper Qu[illegible] Co., which operates a large smelter at Douglas, to construct a transmission line to [illegible] mines and mill of El Tigre Mining Co. in El Tigre district, State of Sonora, Me[illegible] and furnish them with electric power. T[illegible] line will be 50 miles long. The Copper Queen Co. is already furnishing power for [illegible] street railway system here, in addition to the power

for operating its own smelter. El Tigre Mining Co. was investigating the situation with the view of erecting its own hydroelectric plant when it found an opportunity to enter into a contract with the Copper Queen Co. for power.

TOMBSTONE, ARIZ.—H. D. Madison and Mate Brown have leased the plants of the Tombstone Improvement Co. and the Tombstone Electric Light & Power Co. This gives the lessees control of the gas, water and electric light utilities of Tombstone.

LOGAN, UTAH.—The Trustees of the Utah Agriculture College, Logan, have decided to take action at once on the construction of a power plant for the college. Bids for equipment of the plant will be called for at once. Specifications will provide for the completion of the work by the time the college opens next fall. The college owns water rights on the Logan River between the present plant of the Telluride Power Co. and the irrigation intakes, which will develop more power than will be required by the college at present.

PROVO, UTAH.—The Knight Power Co., Provo, has been incorporated to do an electric power business, and take over the electric power plants owned by Jesse Knight at Santaquin and on Snake Creek, together with applications for water in Snake Creek, Weber River and Santaquin Creek. Jesse Knight is Pres. and R. E. Allen is Vice-Pres. and Secy.

NEPHI, UTAH.—The citizens have voted in favor of issuing bonds for $15,000 for improvements to the electric light plant and water-works system.

•IDAHO FALLS, IDAHO.—We are officially advised that bids were received as follows on July 17 by the City Clerk, for furnishing materials and constructing a hydroelectric plant and pumping station: CHATFIELD & CUTLER CONSTRUCTION CO., (awarded contract) $63,561. Capitol Electric Co., $75,995.

Bids were received as follows for furnishing and installing machinery: MINNEAPOLIS STEEL & MACHINERY CO., Minneapolis, Minn., $28,288 (awarded contract), Utah Electric Supply Co., $27,788; Capitol Electric Co., $28,288, $30,546, $38,199, and $39,677; C. C. Moore & Co., San Francisco, $42,000.

LEWISTON, IDAHO.—The Grand Ronde Power Co. has filed articles of incorporation at Asotin and Pomeroy with a capital of $1,000,000. Extensive surveys of power holdings on the Grande Ronde and the development of 10,000 HP. at that point will be commenced at an early date to replace the water-power plant now located on Asotin Creek.

WINDSOR, ONT.—On June 20 the citizens voted in favor of the Niagara Power by-law authorizing the City Council to issue bonds for $100,000 for installing a transmission line and station for supplying power to the city of Windsor and vicinity.

NEW HAMBURG, ONT.—Bids are asked until noon, July 18, by the town for volt-transformers, switching apparatus, protective apparatus, street lighting apparatus, etc. William Miller is Town Clk.

SASKATOON, SASK.—Bids are asked by J. H. Truesdale, City Clk., until 5 p. m., July 25, for a 250-HP. water-tube boiler. George T. Clarke is City Engr.

CULIACAN, MEX.—It is reported that the Mayo River Power & Land Co., which obtained concessions a few months ago for the installation of hydroelectric plants in the states of Sonora and Chihuahua, will also install one or more plants in the state of Sinaloa. R. M. Jones, Engr., of Denver, Colo., and a party of assistants are measuring the flow of water in various streams in this state with the view of determining the available sites for the proposed plants. This measurement work was also done of the rivers in Western Chihuahua and Eastern Sinaloa. The sites for two plants in the above-named states are said to have been selected and the construction of the plants will soon begin. It is planned to construct transmission lines from the plants to various mining camps and industrial centers within a radius of 150 miles.

BRIDGES.

(*• denotes that this work is advertised in Engineering News.*)

BRIDGEPORT, CONN.—Contract for the construction of the Boston Ave. bridge was awarded on June 24 by the city to the SCHWIERS & SUTTON CO., West St. Bldg., New York, at $20,365. All bids for the filling were rejected. M. A. Kenny is Dir. Pub. Ser.

BUFFALO, N. Y.—The EASTERN CONCRETE STEEL CO., 403 D. S. Morgan Bldg., has secured contract for repairing the bridge at Washington St. over the tracks of the New York Central & Hudson River R. R. at $3,590.

SENECA FALLS, N. Y.—The New York Central & Hudson River R. R. Co., George W. Kittredge, Ch. Engr., New York, has applied for permission to replace the stone arch bridge over Dey St. with a steel structure. Action has been deferred pending decision on grade crossing at the next street.

ROCHESTER, PA.—Bids will be received until July 9 by the Board of County Commissioners at Beaver, S. J. Ewing, Chn., for constructing the superstructure of the Ohio River bridge connecting the Boroughs of Rochester and Monaca, span 117 ft., crossing overhead of the tracks of the P. F. W. & C. R. R. E. K. Morse, Engr., Commonwealth Bldg., Pittsburg.

PITTSBURG, PA.—The REINFORCED CONCRETE CONSTRUCTION CO., 1231 Fulton Bldg., Pittsburg, has been awarded contract for the construction of four reinforced-concrete arch bridges. Bids were opened on June 16.

TANNERY, PA.—The right-of-way has been secured for the Lehigh Valley R. R. $2,000,000 branch between Lumber Yard, on the Hazleton Branch, and Hayes Creek, on the main line of the line, one mile east of Tannery. It will cross the main line of the New Jersey Central R. R. at Lehigh River opposite Hayes Creek by a large bridge, 90 ft. high and over a quarter of a mile long. The bridge, costing approximately $1,200,000, will take about two years to build.

BROWNSVILLE, PA.—The Pennsylvania R. R. Co., A. C. Shand, Ch. Engr., Philadelphia; Pittsburg & Lake Erie R. R. Co. and Monongahela R. R. Co., it is stated, have completed plans for the bridge to be constructed over Monongahela River, near Brownsville Junction. Estimated cost, $750,000. The span will be 450 ft.

PITTSBURG, PA.—We are officially advised that bids were received as follows on June 27 by the city for three river piers of the North Side point bridge: The Friday Contracting Co., $233,500, Sept. 1, 1911; Pnéumatic Caisson Co., $232,000, Aug. 1, 1911; Drake & Stratton Co., $199,400, Aug. 1, 1911; Lewis & Wood, Chicago, Ill., $183,735, July 1, 1911. Contract will be awarded on July 8. N. S. Sprague is Supt. Bureau of Construction.

•BERWICK, PA.—Bids are asked by the Columbia County Commissioners until 11 a. m., July 19, for a permanent floor on the Berwick-Nescopeck bridge across the Susquehanna River here. Specifications are on file at the office of Engineering News.

CUMBERLAND, MD.—The Western Maryland Ry. Co. has awarded contract for 40 or more new bridges, which are to be constructed on the new extension from Cumberland to Connellsville, Pa., to the McCLINTIC-MARSHALL CONSTRUCTION CO., Park Bldg., Pittsburg. Total cost of new structures, $1,000,000. Designs for the bridges are being prepared by H. R. Pratt, Ch. Engr. The terms of the contract provide that the construction company shall have the first bridge in by October and that the entire contract must be completed within one year. The longest structure will be about three-quarters of a mile in length and 100 ft. high, and will be erected at Salisbury Junction, just west of Myersdale, Pa. Large viaducts also will be built at Ohiopyle and at Keystone, Pa., just east of Myersdale.

SUSSEX, VA.—The CATES MACHINE & BRIDGE CO., of Burlington, N. C., has been awarded contract for the construction of two steel bridges. Bids were opened on June 16.

LAURINBURG, N. C.—The Road Commission, Stewartscille Township, Scotland County, will receive bids and plans until July 11, at the office of M. L. John for the construction of seven reinforced-concrete arch bridges, two 30-ft. span, 16-ft. roadway, three 30-ft. span, 12-ft. roadway, two 14-ft. span, 12-ft. roadway.

WELDON, N. C.—The Atlantic Coast Line R. R., E. B. Pleasants, Ch. Engr., Wilmington, N. C., will construct a continuous steel viaduct through Weldon and across Roanoke River, length to be 3,700 ft., of concrete abutments, piers and pedestals, 90 ft. above ordinary level of river. It will require 15,000 cu. yds. of concrete and 2,000 tons of steel and have an elevated passenger station platform, connected with passenger station, to be erected, by covered stairway, baggage and express to be conveyed by elevator.

GAFFNEY, S. C.—Bids will be received by Cherokee County until Sept. 5 for repairing 3-span iron bridge across Broad River and rebuilding approaches. E. Felix Lipscomb is County Superv.

DEMOPOLIS, ALA.—Jesse B. Hearin, Secy. Business League, may be addressed concerning the proposed bridge across Warrior River. The structure will be 341 ft. long, with 54-ft. span and 18-ft. steel tower at each end. Trestles 180 ft. and 200 ft. long will continue from each end of tower. Total length of bridge, 865 ft.; roadway, 18 ft. in clear. Foundations will be on firm bed of rock, with concrete substructure. Estimated cost, $35,000.

MEMPHIS, TENN.—The Memphis Union Station Co., J. L. Lancaster, Pres., has awarded contract to J. A. OMBERG, JR., Memphis, for constructing proposed concrete viaduct from Railroad to Calhoun Ave. Estimated cost, $80,000.

HORSE CAVE, KY.—The Horse Cave & Eastern Ry. Co., Louis Edwards, promoter, 1463 Arlington Ave., St. Louis, Mo., will construct two single-span bridges.

TIFFIN, OHIO.—Bids are asked until 1.30 p. m., July 16, by John H. Lennartz, County Audr., for the necessary labor and material for the construction of new concrete piers under the Heck bridge in Section 25 Township, Seneca County.

NILES, OHIO.—The County Commissioners have awarded contract to the MOUNT VERNON BRIDGE CO., of Mount Vernon, Ohio, for the superstructure of the East Park Ave. bridge at $9,879.

CINCINNATI, OHIO.—Bids are asked until noon, July 8, by the Board of County Commissioners, Fred Dreihs, Clk., for the construction, under specifications No. 71, of concrete bridge and widening of road on Harrison Ave., Mount Washington, in Anderson Township.

•BARBERTON, OHIO.—Bids are asked until noon, Aug. 1, by the village for the construction of a viaduct over the Erie R. R. tracks at Cornell St. Estimated cost of village's share, $30,224.

MOUNT STERLING, OHIO.—The County Commissioners on June 22 let contracts for four cap culverts and for a bridge over Deer Creek on the Alkire land near here, which will be built jointly by Madison and Pickaway Counties. The substructure was let to FRANK KILGORE, of London, at $5,590, and the superstructure to the MT. VERNON BRIDGE CO. at $11,147. There were nine bidders.

Contracts for cap culverts were let as follows: To DURANT & LEIST, for one near the farm of M. K. Dresbach in Walnut Township at $5.95 per cu. yd.; one on Walnut Creek road over a branch of Walnut Creek near the Weaver farm in Walnut Township, at $5.49 per cu. yd.; one on county road south of the East Ringgold schoolhouse and near the farm of W. H. May at $6.05 per cu. yd.

The contract to build a concrete wall as a protection between the canal and Walnut Creek bridge near the David Six farm, was let to JUSTUS & SON at $5.15 per cu. yd.

HAMILTON, OHIO.—Bids are asked by J. E. Brate, County Audr., until 10 a. m., July 19, for the construction of the substructure and superstructure of bridge over Elb Creek, Madison Township.

DEFIANCE, OHIO.—Bids were opened on June 24 by the County Commissioners for the new Francis St. river bridge. Contract for the superstructure was awarded to the TOLEDO-MASSILLON BRIDGE CO., of Toledo, Ohio, at $17,000. SCHNEIDER BROS. secured contract for the substructure at $7.75 per cu. yd.

Bids are asked by S. I. Gruner, County Audr., until 2 p. m., July 18, for the superstructures of two bridges over the Miami and Erie canal, one at Thurston St. and one at Deatrick St.

LORAIN, OHIO.—Bids will be received at the office of the Board of County Commissioners of Lorain County, until 1 p. m., July 19, for furnishing the material and performing all necessary labor for constructing a steel bridge in Huntington Township, one-half mile south and 2½ miles east of Rochester Station, known as the Farnsworth bridge in accordance with the plans and specifications to be furnished by C. H. Lawrence, County Curv.

GREENFIELD, IND.—The GREENFIELD BRIDGE & SEWER CO. has been awarded contract at $3,790 for the construction of a bridge over Blue River on the county line. Bids were opened on June 20.

FREEPORT, ILL.—Bids are asked until 2 p. m., July 18, by the Board of Local Improvements for the construction of 300 ft. of 9-ft. culvert. Plans are on file at the office of John A. R. Daniels, City Engr.

TWO HARBORS, WIS.—Bids will be received until July 11, at the office of John P. Paulson, County Audr., for constructing an 80-ft. steel bridge on concrete abutments over Silver Creek, Township 53 N., Range 10 W., town of Silver Creek.

ALTA VISTA, IOWA.—Contract for constructing a 60-ft. steel highway bridge in Alta Vista, bids opened on June 15, has been awarded to E. L. CHAMBERS, of New Hampton.

FOREST CITY, IOWA.—Bids will be received by L. J. Nelson, Audr. Winnebago County, until 1 p. m., July 19, for the construction of a concrete bridge, with two 50-ft. arches, 16-ft. clear highway and 5-ft. sidewalk on one side.

RED LAKE FALLS, MINN.—Bids are asked until 1 p. m., July 8, by the Board of Supervisors of Deer Park, for the material and labor necessary for the construction of a steel bridge over Clearwater River between Sections 31 and 32 in the township of Deer Park. C. H. Martz is Engr. As planned, the structure will be 96 ft. long on steel tube foundations and reinforced concrete backing with 6-ft. wing.

MINNEAPOLIS, MINN.—Plans are being prepared by W. L. Darling, Ch. Engr. Northern Pacific Ry. Co., St. Paul, Minn., for the construction of a steel bridge across the Mississippi River to Boom Island here. Bids will soon be taken. Estimated cost, $40,000.

ST. PAUL, MINN.—A resolution calling for a bond issue amounting to $400,000 has passed the Board of Aldermen for the construction of a new steel arch bridge across the Mississippi River at Minnesota St. L. W. Rundlett is City Engr.

TAYLOR'S FALLS, MINN.—Contract for the construction of the new steel arch bridge across the St. Croix River here has been awarded to A. Y. BAYNE & CO., of Minneapolis, Minn., at $13,200. The bridge will be built by the states of Minnesota and Wisconsin jointly and the villages of Taylor's Falls and St. Croix Falls, Wis. L. P. Wolf, 204 Essex Bldg., St Paul, is Consulting Engr.

MINNEAPOLIS, KAN.—Bids are asked until noon, July 25, by the County Clk., for the construction of four bridges. W. S. Gearhart is Highway Engr., Manhattan, Kan.

FAIRFAX, S. DAK.—Bids are asked until 2 p. m., July 9, by Ludwig Trautmann, County Audr., for the necessary labor and material for the construction of all bridges, both wood and steel, also repair work as required by the county for one year from date.

KANSAS CITY, MO.—Bids will be received by S. A. Boyer, Clk., Jackson County, until July 25 for the construction of two steel bridges, 24 and 48-ft. span, respectively. R. T Proctor is County Engr.

DALLAS, TEX.—Bids will be received by the Board of Commissioners of Dallas County until Aug. 1 for the construction of a reinforced concrete arch viaduct, to be 4,870 ft. long between abutments, approaches 500 ft. long. Ira G. Hedrick is Engr., Curtiss Bldg., Kansas City, Mo.

LITTLE ROCK, ARK.—The city will construct a concrete bridge or culvert at 19th and Commerce Sts and at Fourth and Spring Sts. Bids are asked until July 11. F. M. Oliver is Clk. Bd.

TULSA, OKLA.—The Tulsa County Commissioners awarded contract on June 22 at $78,174 to the CANTON BRIDGE CO., of Canton, Ohio, for constructing 28 steel and concrete bridges.

OKLAHOMA CITY, OKLA.—The KANSAS CITY BRIDGE CO., 1108A E. 15th St., Kansas City, Mo., has secured contract for sonstructing bridges at Packingtown, Ecroat Crossing, Spencer and Hurrah over Canadian River in Oklahoma County.

ALAMOSA, COLO.—Bids will be received until July 9 by Charles W. Comstock, State Engr., Denver, for constructing a 1-span steel bridge and pile approach across the Rio Grande River near here.

WIGGINS, COLO.—Bids are asked by the Morgan County Commissioners until noon July 23 for the construction of a reinforced-concrete pile slab bridge over the Bijou Creek near here, on the road from Fort Morgan to Denver. W. S. Henderson is Chn. Comrs., Fort Morgan.

DAYTON, N. MEX.—The MIDLAND BRIDGE CO., Gibraltar Bldg., Kansas City, Mo., has been awarded contract to construct a steel bridge across the Penasco River in this county at $1,950.

SHELTON, WASH.—Bids will be received by the Board of County Commissioners until July 8 for the construction of a wood and iron through truss highway bridge of 100 ft. clear span and 18-ft. roadway across Vance Creek.

KENNEWICK, WASH.—The North Coast R. R. has awarded contract to the ESCHBACH-BRUCE CO., of North Yakima, for the construction of a bridge across the Yakima River at Parker and a crossing over the Northern Pacific Ry. near here.

CENTRALIA, WASH.—The PENN BRIDGE CO., Beaver Falls, Pa., has been awarded contract for the construction of four steel bridges over the Chehalis River, the Nowaukum River at the foot of Summersett Hill, the Tilton River near Harmonym and the Skookumchuok River on the Olympia and Colitz Road at $10,000.

NAPA, CAL.—Bids will be received by N. M. Collins, Clk. Bd. of Supervisors at his office, until 10 a. m., July 12, for the following street work in accordance with plans and specifications on file with clerk, for the building of a stone bridge across the small creek on the county road in Road District No 13, one-eighth of a mile south of Harmony schoolhouse.

FORTUNA, CAL.—Plans are being drawn by the County Surveyor for the proposed Eel River bridge, to be located at Singley's Station. Bids will be asked for both steel and reinforced-concrete bridges. The plans will be ready for bids early in July.

OCEANSIDE, CAL.—The County Board of Supervisors will receive bids until July 8, for the construction of a bridge 600 ft. long over the San Luis Rey River at Oceanside. Bids must be submitted for both a concrete and a wooden structure. There will be two 100-ft. clearance spans at the south end of the bridge and ten 17-ft. spans.

WOODLAND, CAL.—The Southern Pacific Ry. Co., William Wood, Ch. Engr., San Francisco, has awarded contract, it is stated, for abutments of the bridge to be constructed over the Sacramento River to the MISSOURI VALLEY BRIDGE & IRON CO., Leavenworth, Kan.

EDMONTON, ALTA.—Bids will be received by J. E. Schwitzer, Asst. Ch. Engr., Canadian Pacific Ry. at Winnipeg, until 5 p. m., July 20, for erection of substructure of bridge over the North Saskatchewan River at Edmonton. Plans and specifications may be seen and forms of proposal obtained at the following offices: A. L. Hertzberg, Division Engr., Toronto; C. N. Monsarrat, Engr. of Bridges, Montreal; N. E. Brooks, Division Engr., Calgary, Alta.; H. Rindal, Division Engr., Vancouver, B. C., and J. E. Schwitzer, Asst. Ch. Engr., Winnipeg.

BUILDINGS.

(*• denotes that this work is advertised in Engineering News.*)

CONCORD, N. H.—James Knox Taylor, Superv. Arch. of the Treasury, Dept., Washington, D. C., has awarded contract for the construction of a post-office at Concord, N. H., to JOSEPH SEAY & CO., of Petersburg, Va., at $51,200.

BOSTON, MASS.—A $3,000,000 hotel will be erected on the site of the old Museum of Fine Arts, facing Copley Sq., and will practically cover the whole of the block bounded by Dartmouth St., Trinity Pl., St. James Ave. and Stuart St. Opposite are the public library and Trinity Protestant Episcopal Church. The project is that of the Copley Square Trust, Moses Williams, 126 State St., and J. Morris Meredith, 15 Congress St., Trustees. The Trust has purchased the property from the Trustees of the Fine Arts Museum. The hotel is to be leased, upon completion, to the Plaza Operating Co., B. Beinecke, Pres., which operates the Plaza Hotel in New York. H. J. Hardenburgh, Arch., 47 West 34th St., New York, who designed the Plaza, has been commissioned to prepare plans for the new hotel. In general outline the building will be of a classic design, so as to harmonize with the Public Library building. It will have an area, approximating 200 × 235 ft. The general contract has been awarded to the GEORGE A. FULLER CO., Fuller Bldg., New York, which expects to begin work as soon as the plans are completed. Noted on June 9.

CHELSEA, MASS.—Bids are asked until 3 p. m., Aug. 4, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Chelsea, Mass.

•WOBURN, MASS.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Aug. 9, for the construction, complete (including plumbing, gas fitting, heating apparatus, electric conduits and wiring) of the U. S. post-office at Woburn, Mass.

NEW BRITAIN, CONN.—The Building Committee of the New Britain General Hospital has awarded to B. H. HIBBARD CO., of New Britain, Conn., the contract for the proposed operating building.

MANCHESTER, CONN.—Cheney Bros., Inc., have contracted with L. P. SOULE & SONS CO., 166 Devonshire St., Boston, Mass., to construct their proposed office building. This will be 90 × 100 ft., of granite and brick with limestone trimmings. The

office will be equipped with fireproof vaults. Hartwell, Richardson & Driver, 62 Devonshire St., Boston, Mass., are Archs.

NEW YORK, N. Y.—Henry B. Harris and Jessie Lasky have bought the property at 206 to 212 West 46th St., upon which they will erect a theater to cost $200,000. Herts & Tallant, 113 East 19th St., have drawn the plans for a structure, 80 × 100 ft., which will be finished by Jan. 1.

Plans have been filed by Emery Roth, 20 East 42d St., for building an 8-story apartment hotel on the north side of 121st St., 175 ft. west of Amsterdam Ave. The building will be fireproof throughout, the facade being of brick, with small canopied balconies of Spanish tile. The structure will be finished in the Spanish style of architecture, with two towers to be used as studios. It will have a frontage of 150 ft. and a depth of 80.11 ft., with accommodations for the 109 families. The Sethlow Realty Co., Louis Eisenberg, Pres., is the owner of the proposed building, which is estimated to cost $350,000.

Clinton & Russell, Archs., 32 Nassau St., have filed plans for a 12-story "L" shaped office building to be built at 91 William St. and 63 Maiden Lane. The building will have a frontage of 14.8 ft. on William St. and 27.1½ ft. on Maiden Lane. The facade will be of limestone, with terra cotta and granite trimmings with a stoop entrance on Maiden Lane and a street level entrance on William St. with a penthouse on the roof. The Maiden Lane & William St. Co., Major A. White, Pres., is the owner. Cost, $125,000.

Reed & Stern, 5 East 42d St., are planning a 20-story hotel to cover the block bounded by Madison and Vanderbilt Aves. and 43d and 44th Sts. The site is 200.10 × 190 ft., and is owned by the New York Central & Hudson River R. R. Co.

NEW YORK, N. Y.—John T. Underwood, 30 Vesey St., has engaged Goldwin Starrett & Van Vleck, 103 Park Ave., to draw plans for an 18-story building at Vesey and Church Sts., facing the offices of Trinity Corporation to the rear of St. Paul's Church yard. It will probably involve an outlay of $400,000. The construction contract has been awarded to the TIDEWATER BUILDING CO., 16 East 33d St. Work on the structure will begin within a few weeks. The proposed building will be in the nature of a tower, having all sides finished as facades, two stories being in limestone and the superstructure of brick and terra cotta. There will be four high-speed elevators. The ground to be improved has a frontage of 52.5 ft. in Vesey St. and 76 ft. in Church St.

The EDWARD CORNING CO., 100 William St., has secured the general contract to erect the 12-story cooperative apartment house on the plot, 60 × 123 ft., at the corner of Lexington Ave. and 21st St. The plans have been prepared by Herbert Lucas, Arch., 5 East 42d St.

Plans have been filed for two mercantile structures at the lower end of Hudson St. One was for a 6-story brick warehouse, to be erected at the southwest corner of Hudson and Beach Sts., with a frontage of 74.6 ft. on Hudson st. and 100 ft. on Beach St. The Protestant Society for Promoting Religion and Learning in the state of New York is the owner, and the cost is placed at $120,000 by the architect, Charles C. Haight, 452 Fifth Ave. The building has been leased by Lamont, Corliss & Co. The second is to be an 8-story mercantile building at the southwest corner of Hudson and Laight St., for Frank E. Habicht and Herman W. Braun, fronting 51.1 ft. on Hudson St. by 100 ft. on Laight St. G. E. J. Pistor is Arch., and the cost will be $70,000.

A 6-story nurses' home for Roosevelt Hospital will be erected at a cost of $120,000 on the 59th St. side of the block east of Tenth Ave., from plans by R. H. Robertson & Son, Archs., 160 Fifth Ave. The building will be 154.10 × 54 ft., and will contain 128 rooms for the use of nurses.

Schwartz & Gross, Archs., 347 Fifth Ave., have filed plans for a 6-story apartment house to be erected at the southwest corner of Emerson St. and Post Ave. for the Hensle Construction Co., Charles Hensle, Pres. The building will have a frontage of 155 ft. and a depth of 90 ft. and will contain apartments for 80 families. Cost, $125,000.

NEW YORK, N. Y.—Bids are asked by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 3 p. m., July 18, (1) for fire protection work at Public School No. 15, Third Ave., corner of State St., Boro. of Brooklyn; (3) for metal ceilings, painting, etc., at Public Schools Nos. 17 Annex, 19 Annex, 43, 50, 55, 68, 75, 86, 88, 106, 113 and 117, Boro. of Brooklyn; (4) for metal ceilings, painting, etc., at Public Schools Nos. 25, 65, 70, 72, 76, 108, 109 and Erasmus Hall High School, Boro. of Brooklyn; (5) for the construction of pupils' closet buildings and improving the sanitary conditions at Public School No. 72, on the northeast corner of Schenck Ave. and New Lots Road, Boro. of Brooklyn.

The following bids were received by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, on July 5, for general construction, etc., of Public School No. 95, on West Houston and Clarkson Sts., about 125 ft. east of Hudson St., Boro. of Manhattan: Stowe Construction Co., $353,300; Charles H. Peckworth, 415 Hudson St., $369,790; George Hildebrand, 38 Park Row, $407,000; John Kennedy & Co., 1133 Broadway, $383,628; William F. Cunningham, 438 East 91st St., $368,500; P. J. Brennan & Son, $374,000; J. F. Walsh Construction Co., 1 Madison Ave., $376,540; T. A. Clark Co., $376,000; A. L. Guidone & Co., $369,000; Thomas McKeown, $383,000.

AMSTERDAM, N. Y.—Bids are asked until 3 p. m., Aug. 8, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Amsterdam, N. Y.

HACKENSACK, N. J.—The following bids were received on June 28 by the County Building Committee, Bergen County, Hackensack, N. J., for erection and construction of a three-story and basement fireproof jail for Bergen, County, Hackensack, N. J.: John T. Brady Co., 103 Park Ave., New York, $246,840, time, June 28, 1911; Thompson-Starrett Co., 49 Wall St., New York, $271,507, Aug. 12, 1911; Murphy Construction Co., 1031 Madison Ave., New York, $291,138, June 15, 1911; Thomas J. Reily Co., 103 Park Ave., New York, $278,210, Aug. 1, 1911; Luke A. Burke Sons Co., Inc., 25 West 42d St., New York, $253,609, Sept. 9, 1911; Hedden Construction Co., 1 Madison Ave., New York, $269,430, July 1, 1911.

CHAMBERSBURG, PA.—Bids were received as follows on June 29, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Chambersburg, Pa.: Harman Bros., Williamsport, Pa., $66,000; J. E. & A. L. Pennock, Philadelphia, $67,870; A. E. Badgeley, Binghamton, N. Y., $62,867; Hess & Pentz, Scotland, Pa., $74,590.

BALTIMORE, MD.—We are officially advised that the lot at the corner of German and Grant Sts., which was purchased by Martien & Co., real estate brokers, for clients, will be improved with a fireproof additional 8-story office building for the United States Fidelity & Guaranty Co. to cost $125,000. The structure will be 65 ft. front on German St. with a depth of 72 ft. to Grant St., and will be an addition to the present building at Calvert and German Sts. Otto G. Simonson, American Bldg., is Arch. Bids will be received until July 15. Noted on June 16.

BALTIMORE, MD.—Ground will be broken in a few days for the erection of a large warehouse and a lithographing building, to cost $41,500, for the Southern Can Co., at Lancaster and Wolfe Sts. Application has been made for permission to begin the construction. The buildings will be of brick and concrete and fireproof throughout. They will cover a space measuring 118 ft. 8 ins. × 96 ft. 6 ins. and will be three stories high. The contract has been awarded to JOHN COWAN, 106 West Madison St., builder. The architects are Wyatt & Nolting, Keyser Bldg.

The RAYMOND CONCRETE PILE CO., of New York and Chicago, has been awarded the contract for the foundation of Public School No. 2, at Stiles and Gough Sts., Baltimore. Otto H. Simonson, American Bldg., is Arch. ENGINEERING-CONTRACTING Co., 502 St. Paul St., has the general contract.

CLARENDON, VA.—Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C., are preparing plans and specifications for a church to be built for St. Charles Roman Catholic Congregation.

LYNCHBURG, VA.—The Southern Ry. Co. will erect a passenger station here from plans being prepared by Milburn, Heister & Co., Archs., Home Life Bldg, Washington, D. C.

KINGWOOD, W. VA.—The Bank of Kingwood has commissioned Milburn, Heister & Co., Archs., Home Life Bldg., Washington, D. C., to prepare plans and specifications for a bank and office building. Plans will be ready about Aug. 15.

AIKEN, S. C.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded to AMBROSE B. STANNARD, St. James Bldg., New York, contract for the construction of a post-office building at Aiken, S. C., at $45,618.

NEWNAN, GA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract to ALGERNON BLAIR, Montgomery, Ala., for the construction of a post-office building at Newnan, Ga., at $47,863.

TROY, ALA.—Bids were received as follows on July 5 at the office of James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Troy, Ala.: King Lumber Co., Charlottesville, Va., $43,652; Algernon Blair, Montgomery, Ala., $42,900.

HATTIESBURG, MISS.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded to the NEWPORT CONTRACTING & ENGINEERING CO., Newport News, Va., contract for the construction of a post-office at Hattiesburg, Miss., at $69,455.

SHREVEPORT, LA.—George R. Mann, Arch., Mann Bldg., Little Rock, Ark., is drawing plans for a 10-story bank and office building to be erected in this city by the Commercial National Bank. The building will cost about $300,000 and will contain 216 offices.

MEMPHIS, TENN.—MURCH BROS. CONSTRUCTION CO., Odd Fellows Bldg., St. Louis, which was recently awarded a contract to build the $650,000 Union Station at Memphis, will start work at once. The contract was awarded by the Memphis Union Station Co., which has about finished the excavating. The station will be at Second and Calhoun Sts., on a lot 300 × 100 ft. It will be built in Bedford marble, and accommodate fourteen tracks and five railroads.

CLEVELAND, OHIO.—Contracts have been awarded for the warehouse for the Strong, Carlisle & Hammond Co. on Perkins Ave. near East 38th St. It will be a 4-story fireproof structure of steel and reinforced-concrete construction. The plans were prepared by J. Milton Dyer, Cuyahoga Bldg., and the general contract has been awarded to the SAMUEL AUSTIN & SON CO.

PORTSMOUTH, OHIO.—Bids will be received by the Board of Education of Portsmouth until July 14 for the erection of a 3-story high school building. John E. Williams is Pres. and William C. Hazleback, Clk. of the Bd. of Education.

SOUTH BEND, IND.—H. H. Richards, Arch., 134 Van Buren St., Chicago, Ill., has prepared plans for a flat building to be erected by Dr. Martha V. Thomas, of this city, at 505 West Washington Ave. Estimates will be received for both a 2 and 3-story building, no definite decision as to the height of the building having been reached. In case the structure is three stories high there will be accommodations for eight suites, and if two stories, five suites. The dimensions of the building will be 100 × 50 ft. The building will be of pressed brick construction and modern in every respect.

JEFFERSONVILLE, IND.—Bids were received as follows on July 1 at the office of James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Jeffersonville, Ind.: Christ Kauzler & Son, Evansville, Ind., $58,797; Conners Bros. Co., Lowell, Mass., $67,600.

EVANSVILLE, IND.—Plans submitted by the architect for the construction of the proposed hospital to be built at the Southern Indiana Hospital for the Insane have been approved. Bids will be advertised for soon by the Trustees.

MONROE CITY, IND.—The contract for the erection of a brick and stone school house of 14 rooms has been let to AUGUST OHM, of Terre Haute, Ind., at $51,692.

MISHAWAKA, IND.—Fred W. Keller, of South Bend, Ind., is contemplating the erection in Mishawaka of a 2-story business block. It will be constructed of pressed brick and will be 120 × 132 ft. There will be six store rooms on the first floor, the second will contain office rooms, flats and a public hall. It is to be electric lighted, and steam heated.

DETROIT, MICH.—F. T. Barcroft, 1728 Ford Bldg., is taking figures for an 8-story department store, 100 × 100 ft., for Goldberg Bros., 225 Woodward Ave. White enamel and stock brick, Bedford stone, terra cotta, composition roof, structural iron, hardwood finish and floors, mosaic tiling and electric fixtures will be used in construction. Cost, $60,000.

Louis Kamper, Fine Arts Bldg., is preparing plans for a mausoleum and chapel, 180 × 110 ft., 20 ft. high for the Roseland Park Cemetery Association, John Western, Secy., Tolsma Bldg. Construction will be of reinforced concrete with concrete roof, hardwood finish and floors, structural iron, mosaic tiling and electric fixtures. Cost, $40,000.

Donaldson & Meier, Penobscot Bldg., are preparing plans for remodelling a 6-story and basement store building for Wright-Kay & Co., 140 Woodward Ave. They will take figures about July 1.

Smith, Hinchman & Grylls, Washington, Arcade Bldg., have let the following contracts for a store building, three stories and basement, 75 × 80 ft., for L. A. McCreary, Columbia Hotel, Cleveland, Ohio: Structural iron work, to H. B. LEWIS, 45 Joseph Campau; carpentry, to STRELOW & PETT, 694 Mack Ave.; masonry, to F. H. GODDARD, 910 Ford Bldg.; plastering to FRITSCH & CO., Penobscot Bldg.

WYANDOTTE, MICH.—Harley & Atcheson, Bowles Bldg., have been commissioned to prepare plans for a 3-story and basement warehouse to be located at Wyandotte, Mich. They will receive bids at once. Stock brick, Bedford stone, composition roof, galvanized iron, cornice and electric fixtures will be used in construction.

ROCK ISLAND, ILL.—Bids are asked by Lt.-Col. F. E. Hobbs, Ordnance Dept., U. S. A., until 2 p. m., July 25, for the erection of a reinforced-concrete brick storehouse at Rock Island Arsenal.

GREENVILLE, ILL.—Bids were received as follows on June 30 by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office at Greenville, Ill.: King Lumber Co., Charlottesville, Va., $54,770; Barnes Bros., Bradford, Ohio, $47,280; Hiram Lloyd Building & Construction Co., Odd Fellows Bldg., St. Louis, $50,877; Conners Bros. Co., Lowell, Mass., $47,250.

CHICAGO, ILL.—Plans have been completed by the Midcity Trust & Savings Bank for the erection of its proposed new building at the southwest corner of Madison and Halsted Sts., on ground acquired recently. The lot fronts 119 ft. on Madison St. and has a depth of 130 ft. on Halsted St., and this will be improved with a 6-story and basement fireproof office building to cost about $300,000. It is said that the walls and foundations will be made heavy enough for a 12-story building, to which height the structure will be carried if a sufficient demand for space develop. H. J. Rathje will be Pres. and Robert Foreman Cashier, while the directors will be Edward Morris, John A. Spoor, Arthur B. Leonard and other local capitalists. The construction work will be done by the GEORGE A. FULLER CO., 204 Dearborn St. Horatio R. Wilson & Co. are Archs., 218 La Salle St.

CHICAGO, ILL.—A decision to construct the proposed $25,000,000 terminal of the Pennsylvania R. R., between Canal St. and the Chicago River, and from Madison St., South, to Vanburen St., has been reached and concurred in by the directors of the St. Paul, the Alton and the Burlington roads, which will occupy the station jointly. The plans for the structure have been prepared under the direction of Thomas Rodd, Ch. Engr. of the Pennsylvania system, and submitted to Daniel H. Burnham, Arch., Railway Exchange Bldg., Chicago.

William P. Doerr, of the firm of Doerr Bros., Archs., Chamber of Commerce Bldg., has acquired a site on the South Side at the corner of Drexel Boulevard and 47th St., upon which he plans to erect an apartment building on the court plan which will cost about $200,000.

MILWAUKEE, WIS.—The PHOENIX FERRO CONCRETE CO. has been awarded the contract for the barn and stables to be erected by the Gridley Dairy Co. on Sycamore St., near Eighth. Cost, $45,000. Leenhouts & Guthrie, 104 Wisconsin St., are Archs.

*DECORAH, IOWA.—Bids are asked until 3 p. m., Aug. 10, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction complete (including plumbing, gas piping, [illegible]ng apparatus, electric conduits and [illegible]ng), of the U. S. post-office at Decorah, [illegible]wa.

ST. PAUL, MINN.—Excavation [illegible] been started by BUTLER BROS., New [illegible]rk Life Bldg., for the construction of a [illegible] brick and stone fireproof factory, whi[illegible]ey are to build for the O'Donnell Sho[illegible] William O'Donnell, Pres. It will [illegible]ilt at Tenth and Sibley Sts., being 6[illegible]0 ft., containing steel beams and gird[illegible] electric passenger elevators, steam heatin[illegible] electric lighting. Cost, $75,000.

Reed & Stem, Endicott Bldg., [illegible]s., are preparing plans for the construct[illegible] three telephone buildings for the N[illegible]western Telephone Exchange Co., John H[illegible], Mgr. One building, four stories high, w[illegible] be built at Fifth and Cedar Sts., 100 × 8[illegible] cost-ing $100,000; another on Univer[illegible] Ave., two stories high, costing $35,000, [illegible] an addition at Dale St. and Laurel Av[illegible] costing $25,000. All will be of fireproof [illegible]struction.

DULUTH, MINN.—Bids will be [illegible]eived by the Board of Education of th[illegible]ity of Duluth, at its office, Central Hi[illegible]chool, until 7.30 p. m., July 18, for the [illegible]rchase of all or any part of the sum of $[illegible]00 of bonds. Charles A. Bronson is Cl[illegible]

ST. PAUL, MINN.—The State [illegible]rd of Control, Charles Halvorson, Ch[illegible] has awarded the contract for the constr[illegible]on of the 3-story pressed brick and cut sto[illegible] fire-proof, ladies' dormitory at the Sta[illegible] Agri-cultural College here to the W. [illegible] HOY CONSTRUCTION CO., Metropolitan Bldg., at $49,849. The other bidders were [illegible] N. P. Fransen & Co., city, $51,900, and [illegible]dson Bros., Minneapolis, at $52,198. C. H[illegible] John-ston, Manhattan Block, is Arch.

Bids are being taken by Buechner & Orth, Archs., 601 Manhattan Bldg., for the construction of a fireproof theater and arcade on Wabasha, Exchange and St. Peter Sts. It will be 100 × 110 ft., with a seating capacity of 1,200 and of brick, steel and cut stone construction. Plate glass fronts, marble and tile work will be used in the arcade. George Benz & Sons are owners, city. Cost, $80,000.

GREAT FALLS, MONT.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded to WILLIAM H. MAXWELL, Tacoma, Wash., contract for the construction of a post-office at Great Falls, Mont., at $174,463.

SAN ANTONIO, TEX.—The San Antonio & Aransas Pass R. R. Co. is considering plans for the erection of a passenger station at San Antonio.

PORT LAVACA, TEX.—A court-house will be erected here, and the County Commissioners will have the plans prepared for the proposed building.

DALLAS, TEX.—Adolphus Busch, of St. Louis, Mo., has delegated Eddie A. Faust, of St. Louis, to carry out his plans for the erection of a hotel here. Barnett, Haynes & Barnett, Frisco Bldg., St. Louis, are Archs. for the proposed building.

HOUSTON, TEX.—The WILLIAM MILLER & SONS CO., 28 Federal St., Pittsburg, Pa., which maintains a Houston office, was the successful bidder on June 25 for the contract to build the Administration Building, the first of a group of structures to be erected for the William M. Rice Institute. The building next in order is the power plant, which will provide the motive power, light and heat for all buildings inside the enclosure, also furnishing power for the mechanical department of the institute. Dr. E. O. Lovett is Pres.

DALLAS, TEX.—The contract for the erection of an 8-story building on the block of ground fronting on Ervay, Marilla and Young Sts. has been let by Butler Bros. to the SELDEN-BRECK CONSTRUCTION CO., Fullerton Bldg., St. Louis, Mo.

FORT SILL, OKLA.—David L. Stone, Const. Q. M., has let the contract for the construction of four buildings at Fort Sill, making a total of 62 buildings already contracted for. On the four buildings Luyter & Lowa, of Sayton, Okla., were low bidders on construction and wiring, their bid being $63,500. The NEWPORT CONSTRUCTION & ENGINEERING CO., of Newport, N. J., has been awarded the plumbing contract for $5,948.

BELLINGHAM, WASH.—Bids will be received by G. Lamping, Chn. of Bellingham Armory Commission, until 2 p. m., July 15, for the construction of the proposed armory building on the southwest corner of Elk and Pine Sts., Bellingham, Wash. The work is to be let in two contracts; first, subdivision, general contract; second subdivision, plumbing and heating.

PORTLAND, ORE.—A. Tichber and A. H. Haogley will erect a 6-story office building on their property at the southeast corner of Seventh and Alder Sts. Cost, $150,000. Emil Schacht & Son, Archs., Commonwealth Bldg., have completed plans and specifications and are planning to ask for bids for two styles of construction.

OAKLAND, CAL.—The first prize for plans for the proposed City Hall, to be built here at a cost of $1,000,000 has been awarded to Palmer & Hornhostle, 63 William St., New York, N. Y. The plans provide for a structure, 280 ft. in height. There will be a tower rising from the center of a classic base. This base will comprise a central portico of the Corinthian order of architecture and occupy the entire street front. Over the entrance will be a great archway, which will give light to the central rotunda, about which the central shaft is to rise. In the latter are to be seven stories and in the attic story above is to be the jail, above which will rise the lantern or cupola. The base will have a height of 60 ft. and a width of 180 ft. The height of the main building is to be 124 ft. and from the base of the cupola to the top of the same, 100 ft.

LOS ANGELES, CAL.—Myron Hunt & Elber Grey, Archs., Union Trust Bldg., are preparing plans for the following buildings to be erected for Occidental College at Eagle

Rock Valley; estimated cost, $100,000: Administration building, 70 x 250 ft.; two dormitories, each 40 x 150 ft., and a science hall, 40 x 175 ft. The buildings are to be two stories in height and constructed of reinforced concrete.

The erection of buildings to cost more than $100,000 for the Los Angeles Country Club will be begun soon, west of Beverly, the general construction contract having been awarded for $75,000 to H. X. GOETZ. The plans were prepared by Hunt, Eager & Bur[illegible], Laughlin Block. The main building will have two stories and be 144 x 340 ft. It will have an exterior of plaster over metal lath, concrete foundation and slate roof. On the first floor will be a sitting room, [illegible]2 x 75 ft., dining room, 48 x 50 ft., room, music room, alcove, dressing grill room, and lockers for ladies, and lounging room and billiard room and lockers for men. The floors will be of oak, and the finish of redwood. There will be plate and art-glass windows and four brick and tile fireplaces. A complete culinary department will be provided and there will be plunge and shower baths. On the second floor will be 35 sleeping apartments, with maple floors and finish of white enamel. There will be large verandas and screen porches with cement floors. A tennis court, golf links and large park will be provided. Water will be supplied from an artesian well on the property.

MONROVIA, CAL.—A. C. Martin, Arch., H. W. Hellman Bldg., is preparing plans for a convent to cost $50,000, to be erected at Monrovia, for Rev. Father J. J. Sheehey. The building will have two stories and basement, brick construction and steam heat.

PASADENA, CAL.—Allison & Allison, Archs., Exchange Bldg., Los Angeles, are preparing plans for a 2-story and basement 16-room residence to be erected at Pasadena. The structure will have brick walls, plastered and timbered, and will be 70 x 72 ft. Cost, $65,000.

NAPA, CAL.—Architects are invited to submit competitive plans for a 3-story reinforced concrete city jail and county courthouse, to be erected in Napa. About $125,000 is available for the work.

FAIRFIELD, CAL.—We are officially advised that the THOMPSON-STARRETT CO., 49 Wall St., New York, N. Y., and Bush and Kearney Sts., San Francisco, Cal., has the contract to build the Solano County court-house in this city, at about $209,000.

PHOENIX, ARIZ.—We are officially advised that the Adams Hotel Co. has been incorporated here for $250,000, to rebuild the Adams Hotel, destroyed by fire recently. J. C. Adams is Pres. In about 30 days bids will be received for a pressed brick or concrete building, 150 x 137½ ft., to cost $225,000 and to be five stories high. The plans are in course of preparation.

OGDEN, UTAH.—The Weber Club, of Ogden, will commission architects soon to prepare plans for a 5-story club-house, to cost $125,000, and to be erected on 24th St. Architects are invited to submit competitive plans.

MONTREAL, QUE.—The Building Inspector has issued a building permit for a structure that will cost $166,000. It was taken out by H. Kellert, and is for a store on the corner of St. Catherine and St. Urbain Sts.

AMHERSTBURG, ONT.—P. Dederich, Chamber of Commerce Bldg., Detroit, Mich., has prepared plans for a 2-story and basement school, 67 x 66 ft., for the Roman Catholic Church of St. John Baptist, Amherstburg. Local stone, galvanized iron, cornice, structural iron, hardwood finish and floors, and electric lights will be used in construction.

TORONTO, ONT.—Bids will be received until July 9 for the marble work, tiling, roofing, including copper work, conductors, prism lights and slating, etc., plumbing, heating, ventilation, electric wiring, plastering, painting and glazing iron staircases and wrought iron work, in connection with the reconstruction of the west wing of the Ontario Provincial Parliament buildings. J. C. Reaume is Minister of Public Works, Ontario.

ST. CATHERINES, ONT.—The Board of Trustees of St. Catherines General and Marine Hospital has awarded the contract for the erection of a hospital building, 127 x 42 ft., three stories and basement, fireproof, to NEWMAN BROS., St. Catherines, at $46,000.

NEW WESTMINSTER, B. C.—The British Columbia Electric Ry. Co. will soon ask for bids for the construction of a depot in New Westminster, to cost, it is estimated, $80,000. R. H. Sperling, Vancouver, B. C., is Gen. Mgr.

JUAREZ (Chihuahua), MEXICO.—It is announced by the Mayor that a municipal palace will be erected here. A public library building will be erected also.

MEXICO CITY, MEXICO.—Misses Luz and Angelina Bringas, of this city, have let the contract for the construction of an apartment building here to DORNER & BACMEISTER, at $600,000, Mexican currency. The building will be four stories high and of stone and steel construction. A "floating foundation" will be constructed in order to lessen the possibility of damage to the building from earthquakes. The contractors are given 60 weeks in which to finish the building.

WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

HOLYOKE, MASS.—We are officially advised that preliminary surveys and investigations for the construction of the new dam for the proposed reservoir at or in former watershed will be made this year, but no construction work will be done before next year. James L. Tighe is City Engr. Noted on June 16.

FALL RIVER, MASS.—The Water Department will expend $20,000 in water extensions and $100,000 in sewer extensions.

FEEDING HILLS, MASS.—On June 17 the citizens voted in favor of laying an 8-in. pipe line to Feeding Hills Center and approximately 500 ft. of 6-in. pipe south, 500 ft. east and 500 ft. west. About $16,000 of bonds will be issued.

SANGUS, MASS.—The citizens voted on June 23 in favor of extending the water system. H. A. Parker is Town Clk.

EAST HARTFORD, CONN.—The Board of Commissioners of the East Hartford Fire District have made an examination of the proposed extension of the pipe line from the reservoir to Burnside village. Estimated cost, $60,000. A recommendation will be made by the Commissioners at the next meeting of the Board.

CORTLAND, N. Y.—See item under Streets and Roads.

*NEW YORK, N. Y.—Bids are asked by the Board of Water Supply until 11 a. m., July 20, for Contract 98, for making test-borings expected to require casing deeper than 200 ft. or to attain a total depth greater than 500 ft., aggregating about 10,000 lin. ft., in the Boroughs of Manhattan and Brooklyn.

Bids are asked by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, until 2 p. m., July 13, for furnishing, delivering and laying water mains in Brook, Chatterton, Grand, Kingsbridge, Park, Spofford, Townsend and Vyse Aves.; in Bartholdi, Bryant, Canal (west) St. Marys, 166th, 167th, 213th, 216th, 222d, 230th and 231st Sts., Boroughs of Manhattan and the Bronx.

BATAVIA, N. Y.—We are officially advised that plans and specifications for the proposed concrete dam of about 500 cu. yds. are approaching completion. Bids will close about July 20. Address Fred New, City Clk. Russel A. Weintraub is City Engr.

BUFFALO, N. Y.—We are officially advised that the following were the lowest bidders on June 17 for pipe, valves, etc.: For 5,000 tons of c.-i. pipe, 4 to 60-in., U. S. Cast Iron Pipe & Foundry Co., at $23.40 per ton; valves, 4 to 60-in., Rensselaer Mfg. Co., Troy, N. Y.; Corporation cocks, ⅝ to 2 in., Mueller Mfg. Co. F. G. Ward, is Comr. Pub. Wks.

*ATLANTIC CITY, N. J.—See item under Light and Power Plants.

*ATLANTIC CITY, N. J.—We are officially advised that bids were received on June 28 as follows by the Board of Water Commissioners for erecting a new pumping station at Absecon: (a) slate, (b) granite, (c) shingles (asbestos): Thompson & Stiles, Bartlett Bldg., Atlantic City, (a) $53,997, (b) $52,997, (c) $53,747. Wilbert Beaumont, 10 South Tennessee Ave., Atlantic City, (a) $52,000, (b) $51,210, (c) $52,600. EDWARD L. BADER, Bartlett Bldg., Atlantic City, (a) $48,572, (b) $47,500, (c) $48,200 (awarded contract). F. A. CHAPMAN, Hotel Kentucky, Atlantic City, received contract for furnishing and installing electric light wiring, conduits and fixtures in the station, at $2,240. L. Van Gilder is Engr. and Supt. Water Dept.

CAMDEN, N. J.—The City Council on June 30 authorized issuing $400,000 of bonds for an auxiliary water plant for fire and manufacturing purposes; also for laying water mains.

BALTIMORE, MD.—The FLANNERY-GRIFFITHS CO., of Baltimore has secured contract at $5,900 for installing water tank and boiler in the custom house.

BALTIMORE, MD.—One bid was received by the Board of Awards on June 29 for the high-pressure fire line pumping station. This bid was from the B. F. Bennett Building Co. at $127,130. This is the second time bids have been received for the pumping station, former bids having been rejected.

WINSTON-SALEM, N. C.—In connection with the plant to be constructed for the P. H. Hanes Knitting Co., a brick reservoir of 200,000 gallons capacity will be constructed and an automatic sprinkler system installed with fire pumps and an elevated tank of 50,000 gallons capacity. A well of 75,000 gallons will also be bored and a private water system installed. All the cottages and the mill are to be equipped with electric lights and hydrants.

ATLANTA, GA.—The Water Board and Bond Commission on June 23 awarded contract to the NEW YORK CONTINENTAL JEWELL FILTRATION CO., 15 Broad St., New York, for the construction of the new filtration plant here with a capacity of 10,000,000 gallons daily, at $31,000.

ATLANTA, GA.—Specifications for the two coagulating basins provided for in the bond issue, and specifications for intake and overflow towers in the new reservoir, have been finished. The coagulating basins will be constructed of concrete. Each will be 211 ft. long, 190 ft. wide, and 16 ft. deep. The towers will also be constructed of concrete. Bids are asked until July 10. The sum set aside in the bond issue ordinance for this work is $50,000.

LA FAYETTE, GA.—The City Council has engaged J. B. McCrary & Co., of Atlanta, Ga., to prepare plans and specifications for the construction of a water-works and electric light system.

JACKSONVILLE, FLA.—The following bids were received on June 24 by the Board of Bond Trustees for constructing the 3,000,000-gallon reservoir, 100 x 300 ft.: J. D. McGee, Sumter, S. C., $47,850; E. B. Garretson & Co., Jacksonville, $44,997; Bryan & Co., Jacksonville, $49,300; Logan Concrete & Engineering Co., Jacksonville, $54,892; A. J. Cesery & Monk Bros., Jacksonville, $50,865; Lightman & McDowell, Nashville, $66,800; company's plans, $52,675; James Bruin & Co. & T. J. Brown, Jacksonville, $48,504; Piedmont Construction Co., Atlanta, $54,660; company's plans, $53,500; F. W. Long & Co., Jacksonville, $68,770; company's plans, $63,807; Phillips & Turnbull, Jacksonville, $63,940. The bids contemplate raising the reservoir several feet above the level of the ground, the same to be covered.

MONTGOMERY, ALA.—The Mayor has been directed to proceed with the construction of a 5,000,000-gallon reservoir. A. R. Gilchrist, of Montgomery, is Engr.

UNIVERSITY, MISS.—The University of Mississippi will spend about $15,000 in boring wells, constructing water-works and extending the sewer system. Prof. J. H. Dorroh, University, is Engr.

OXFORD, MISS.—The city will receive bids until July 15 for water-works construction. W. L. Smith is Deputy City Clk.

MERIDIAN, MISS.—The Water Works Commission on June 21 awarded contract to the WORTHINGTON CONSTRUCTION CO., of Brookhaven, Miss., for the construction of the storage reservoir here at $37,000.

LOREAUVILLE, LA.—The city will install a tower and tank, 5,000 gallons capacity, 75-ft. iron foundation and also 2,500 ft. of iron pipes. C. F. Berard is Mayor.

POLLOCK, LA.—On June 15 the Town Council decided to construct a water-works system.

DAYTON, OHIO.—Bids will be received until July 9 by the Department Public Service, William A. Budroe, Secy., for furnishing material and constructing an additional water supply for this city, consisting of a single stage, double suction, horizontal, centrifugal, 8-in. turbine pump, direct connected to a horizontal, 3-phase, 60-cycle, 220-volt, alternating-current motor; a water-tight pump chamber, consisting of three 9-ft. lengths of c.-i. pipe, 1¼-in. in thickness, 8 ft. 8 in. in diameter; pump house and appurtenances, complete, etc.

LORAIN, OHIO.—Contract for the extension of the water-works intake pipe was awarded by the city on June 25 to the COAST & INTERIOR CONSTRUCTION CO., of Fayette, N. Y., at $49,545. Cast-iron pipe will be used and contract includes the construction of a crib in Lake Erie at the mouth of the intake.

MILLERSBURG, OHIO.—The citizens have voted in favor of issuing $8,000 of bonds for water extensions. Bids for the bonds will be received July 11.

NEW BREMEN, OHIO.—Bids will be received until July 13 by James R. Marker, Ch. Engr., State Bd. Pub. Wks., Columbus, for constructing a dam and aqueduct for New Bremen. Estimated cost, $15,000.

ATHENS, OHIO.—The Board of Trustees of he Athens State Hospital approved the plans submitted for a new water system which will be installed at a cost of $15,000.

GALESBURG, ILL.—The City Council on June 20 authorized the Water Committee to advertise for bids for water-works improvements, including a Franklin fly-wheel pump, with a capacity of 6,000,000 gallons.

WATERLOO, WIS.—James H. Thompson, 324 Dearborn St., Chicago, Ill., is preparing plans for improvements to the water-works. Estimated cost, $25,000. Bids for construction will be asked as soon as plans are completed. F. E. Peschel is Village Clk.

FAIRPORT, IOWA.—Bids are asked until 2 p. m., July 26, by the Commissioner of Fisheries, Dept. of Commerce and Labor, for a boiler and pump-house for biological station on government reservation here.

INDIANOLA, IOWA.—Bids are asked until 7 p. m., July 11, by J. H. Clark, City Clk., for the construction and material necessary for the water-works. The work includes 10,000 ft. of standard 4-in. c.-i. pipe, 15 Eddy hydrants and 17 Eddy gates. A. H. Gilliland, Indianola, is Engr.

DONNELLY, MINN.—Bids will be received until July 14 by C. R. Sather, Village Recdr., for constructing a water-works system, consisting of a steel tower and tank, 50,000 gallons, 100 ft. high, water mains, gasoline engine and pumping plant. Rowat & Bennett are Engrs., Willmar.

KEARNEY, NEB.—The citizens have voted in favor of purchasing the city water plant from the American Water Co., at $125,000.

CHINOOK, MONT.—The North Chinook Irrigation Association has decided to erect a concrete diversion dam and head-gate at West Fork.

MONTGOMERY CITY, MO.—We are officially advised that the city is planning to make extensive improvements to the water-works system and is also planning the construction of a sanitary sewer system. Fuller-Coult Co., are Engrs., Chemical Bldg., St. Louis.

DEXTER, MO.—The city, we are advised, is contemplating the construction of complete water-works and sewer system. Fuller-Coult Co., Chemical Bldg., St. Louis, has been retained as engineer.

PARAGOULD, ARK.—Improvement District No. 2 will spend $15,000 to construct a water works system, to include a 300,000-gallon reservoir and water main. C. E. Waddell is Engr., Paragould.

TEXARKANA, TEX.—The Texarkana Water Corporation, A. A. Haynes, Mgr., will construct 25,000 additional feet of water main and erect a brick pumping station.

EL PASO, TEX.—The city has voted $375,000 of bonds for the purchase of the International Water Co.'s plant.

LAREDO, TEX.—The Espejo Land & Irrigation Co. will construct a large system of irrigation upon a tract of 18,600 acres here. B. F. Nicholson, of San Antonio, is Pres.

HAMILTON, TEX.—F. H. Lancashire, of Dallas, Tex., has been retained to make plans and specifications for a water-works system. Estimated cost, $15,000. E. A. Perry is Mayor.

FORAKER, OKLA.—Bonds have been voted for $30,000 for water-works and electric light plant. Preliminary plans have been prepared by F. H. Lancashire, of Dallas, Tex., who will proceed at once to prepare the details and the town will then advertise for bids. W. L. Leaton is Town Clk.

CARBONDALE, COLO.—The citizens have voted in favor of constructing a water system here. Estimated cost, $27,500.

DENVER, COLO.—Bids will be received by the North Fort Morgan Reservoir Co. at its office, 726 Symes Bldg., Denver, until noon, July 9, for the construction of an earthen dam across Wildcat Creek, in Morgan County. The first work will require the excavation and placing in embankment of about 50,000 cu. yds. of earth. Plans and specifications may be seen at the office of the company and at the office of Prince & Izett, Engrs., 212-214 Armstrong Bldg., 1520 Champa St., Denver.

VANCOUVER, WASH.—The city will construct water-works according to plans by H. H. Lotter, of Vancouver. Estimated cost, $200,000.

WENATCHEE, WASH.—George D. Brown and associates have been given a franchise for the construction of a pipe line for irrigation purposes along certain county roads.

DISHMAN, WASH.—J. W. Strack, Jamieson Bldg., Spokane, is preparing plans for an irrigation system to cover 250 acres of land about one mile east of here for Pierce Bros. of Spokane.

IRONDALE, WASH.—The contract for laying 2,500 ft. of 4-in. wood pipe and 3,000 ft. of 1¼-in. galvanized pipe has been let to JONES & CROUTEN of Port Townsend.

CHELAN, WASH.—The Wapato Irrigation Co. has awarded contracts to the OKANOGAN CONTRACTING & DEVELOPING CO., of Brewster, and BERGMAN & GILLEN, of Chelan, for work on its irrigation project at $10,000.

SEATTLE, WASH.—Bids were received as follows on June 24 by the city for lining, etc., of the Beacon Hill reservoir, Cedar River Water System No. 2: West Coast Construction Co., Alaskan Bldg., Seattle, $303,827; John T. Badenhausen, 220 Arcade Annex, Seattle, $332,887; KIELURTZ, SMITH & ROWNTREE, 419 Bailey Bldg., Seattle, $290,682 (awarded contract); Puget Sound Bridge & Dredging Co., 432 Central Bldg., Seattle, $350,245; International Dredging Co., 501 Central Bldg., Seattle, $321,240. R. H. Thomson is City Engr.

ALAMEDA, CAL.—Alfred Bannister, employed by the city to work with the city engineer on the Bay Cities Water Co.'s proposition, has filed a report on the cost of installing a distributing system in Alameda, together with maps and data bearing upon the sources of supply, etc., and has estimated the cost for a population of 50,000 at $827,000.

SACRAMENTO, CAL.—The Supervisors have passed an ordinance granting a franchise to the East Sacramento Water Co. to supply water to residents of East Sacramento. Plans are being prepared for a tower. Estimated cost, $15,000.

FULLERTON, CAL.—The Jauss Investment Co., Pacific Electric Bldg., Los Angeles, is having plans prepared and will be ready for bids in a month for the construction of a 5,000,000-gallon reservoir for water storage, near Fullerton, Cal.

NEPHI, UTAH.—See item under Light and Power Plants.

MURRAY, UTAH.—G. T. Ingersoll, of Salt Lake City, has estimated the cost of a water-works system here at $51,255.

BOISE, IDAHO.—The State Land Board has approved the application of the Grasmere Irrigation Co. for the segregation of 56,000 acres of land in Owyhee County. C. B. Haradan, of Seattle, is Pres. The project will involve the expenditure of about $1,000,000 in getting the land under water.

SEWERS.

(* *denotes that this work is advertised in Engineering News.*)

DURHAM, N. H.—Metcalf & Eddy, Engrs. and Sanitary Experts, Boston, Mass., are preparing plans and specifications for the construction of the sewage system at the New Hampshire Agricultural College, Durham, which they recommended in their report some months ago. They will be ready to receive bids on this work as soon as the plans are completed.

MALDEN, MASS.—Bids are asked until 2.30 p. m., July 22, by the Metropolitan Water and Sewerage Board, 1 Ashburton Place, Boston, for constructing in rock and earth trench Section 66 of the extension of the north system, in Broadway, Malden, in accordance with the forms of contract and specifications to be furnished by the Board. Some particulars are estimated to be as follows: Length, 2,631 ft.; inside diameter of sewers, 18 ins. and 12 ins.; 60 cu. yds. of Portland brick masonry; 500 cu. yds. of concrete masonry in trench; 200 cu. yds. rock excavation in trench. The invert of the sewer is from 12 ft. to 22 ft. below the street surfaces. Henry H. Sprague is Chn.

MARLBORO, MASS.—The city will continue the improvements on its sewer system this summer. Metcalf & Eddy, Engrs., Boston, who have supervised the sewage works for the past year, will continue in general charge.

*HARTFORD, CONN.—Contract for the construction of about 6,000 lin. ft. of 54 to 84-in. sewer in the East Side interceptor system, bids for which were opened on June 27, has been awarded to the HARTFORD PAVING & CONSTRUCTION CO., Hartford, Conn., at $158,161. List of bidders noted last week.

NEW YORK, N. Y.—The Board of Estimate has authorized the building of an outlet for the Ingleside sewer system, which drains a great part of Flushing and its environs. This will put in service a system

that has cost $250,000, and will drain a territory where many large developments are under way. In addition the Board finally adopted several important topographical maps in Queens, and authorized proceedings to take title to the land needed to widen Queens Boulevard to 200 ft. for a distance of six miles from Long Island City.

NEW YORK, N. Y.—Bids are asked by Cyrus C. Miller, Pres., Boro. The Bronx, until 11 a. m., July 14, for constructing sewers and appurtenances in several streets.

BINGHAMTON, N. Y.—Bids are asked until 4 p. m., July 13, by the Board of Contract and Supply for sewers in Gold and Elm Sts. and Orton Ave.

*FREEHOLD, N. J.—Contract has been awarded to ARTHUR K. HILLPOT, of Red Bank, N. J., by the city for sewerage extensions and pumping stations, at $18,915. Bids were opened on June 22. List of bidders noted last week. Waring, Chapman & Farquhar are Engrs., 874 Broadway, New York.

*HADDON HEIGHTS, N. J.—Bids are asked until 8 p. m., July 19, by the Mayor and Borough Council for the construction of certain sanitary sewers and sewage disposal works, being a part of a general sewerage system shown by plans and specifications filed with the Borough Clerk. Copies of the specifications and plans may be seen also at the office of the engineers, City-Wastes Disposal Co., 156 Fifth Ave., New York. Approximately, the proposed work consists of about 36,000 ft. of vitrified pipe sewers, 8-in. to 12-in. laid complete, with manholes and flush tanks: a small indeterminate amount of agricultural drain-tile laid in sewer trench; sewage disposal works consisting of masonry sewage tanks, masonry coke-filled filters, sand filters with earth embankments, piping, valves, siphons, etc.

BRISTOL, PA.—The State Board of Health at Harrisburg has approved plans for a sewer system. Estimated cost, $63,000.

WEST CHESTER, PA.—We are officially advised that the city will construct a sewage disposal plant. N. R. Rambo is City Engr.

CENTERVILLE, MD.—The city has engaged Robert B. Morse, Palatka St., near Garrison Ave., Baltimore, Md., as engineer in charge of constructing the sewer system.

BALTIMORE, MD.—Bids are asked until 11 a. m., July 20, by the Board of Awards for constructing storm water drains, Contract No. 10. Calvin W. Hendrick is Ch. Engr. Sewerage Comn.

ATHENS, GA.—Plans are being prepared for sewers in the western portion of the city, and due to the surrounding conditions, it will be necessary to pump the sewage. The engineer would like to install an automatic system for disposing of this sewage and an ejector or pumps of reliable type will be considered. J. W. Barnett is City Engr.

PENSACOLA, FLA.—The citizens on June 14 voted in favor of issuing $100,000 of additional sewerage bonds and $150,000 for street paving. L. E. Thornton is City Engr.

UNIVERSITY, MISS.—See item under Water Supply—Irrigation.

KNOXVILLE, TENN.—The Board of Public Works has awarded contract to LONG & PRICE, of Knoxville, for constructing sewers in Maskall Alley, Depot St., and East Church Ave.

CHATTANOOGA, TENN.—The Board of Public Works, H. F. Van Dusen, Chn., has awarded contract, at $16,980, to H. S. BOSLER, of Chattanooga, to erect and equip the pumping station for cross-town or intercepting sewer, building to be frame. Robert C. Hooke is City Engr.

*LAFOLLETTE, TENN.—On July 25 the Board of Public Works will let contracts for the construction of sewer and concrete sidewalks.

MEMPHIS, TENN.—The Board of Commissioners on June 28 awarded contract to T. A. GARVIN for the construction of the Olive St. district sewer, at $11,469.

LEXINGTON, KY.—The city has awarded contract to JOSEPH MELVIN & CO., of Lexington, for the construction of a sanitary sewer in Maple Ave., from Fourth to Fifth Sts., and in Jefferson St., from Main St. to Maryland Ave. John Skain is Mayor.

BELLEFONTAINE, OHIO.—About 13 miles of sewers will be laid and bids for the construction will be asked in the fall. Paul O. Batch is Clk. Bd. of Control.

LEBANON, OHIO.—PRICE & HURLEY, of Marion, Ohio, have secured contract, at $5,425, for the construction of 6,900 ft. of sewers. Bids were opened on June 24.

ST. BERNARD (Cincinnati post-office), OHIO.—Bids are asked by George Schroeder, Village Clk., until noon, July 19, for a storm water sewer. T. A. Stewart is Village Engr., 1112 Traction Bldg., Cincinnati.

EVANSVILLE, IND.—MEGULAR CONSTRUCTION CO. has secured contract for the construction of a sewer in the alley between Oakley St. and Fifth Ave., from Franklin St. to Virginia St., and JOHN L. NEWMAN, for the sewer in block 32, Lamasco.

MARION, IND.—Bids will be received until July 8 by Frank B Heck, Clk. Bd. Pub. Wks., for constructing the 18th St. storm sewer.

*MILAN, MICH.—The Common Council will receive bids for the construction of First, Second and Church St. sewer, in Milan until noon, July 15. W. P. Gregory is Clk. Estimated cost, $2,600.

DANVILLE, ILL.—Bids will be asked in August for constructing the sewer in Fairchild St. of vitrified pipe, 18, 24, 27, 30 and 36-in.

HILLSBORO, ILL.—The city proposes to construct a sewer system probably of pipe at a cost of $37,000. J. A. Trimble, of Charleston, is Engr.

BUSHNELL, ILL.—Peter Simons, of Quincy, Ill., has submitted the lowest bid to the city for the construction of a sewer system at $20,688.

KAUKAUNA, WIS.—Bids are asked by the City Clerk until 4 p. m., July 11, for sewers in several streets.

MADISON, WIS.—The City Engineer has completed plans for a new sewerage disposal plant for the city. Estimated cost, approximately, $180,000.

KNOXVILLE, IOWA.—We are officially advised that the city has let contract to the TURNER IMPROVEMENT CO., of Des Moines, Iowa, for 5,000 ft. of 8-in. sewers. Hall & Adams are Engrs., Centerville, Iowa.

WATERLOO, IOWA.—DEARBORN & JACKSON have secured contract for the construction of sewers in the following streets: East Fourth St., Newel to Ricker Sts., 24-in. pipe; East Fourth St., Ricker to Gable Sts., 21-in. pipe; Conger St., Broadway to Grand View, 18-in. pipe; Conger St., Grand View to Avon St., 15-in. pipe; Riehl St., Broadway to Grand View, 15-in. pipe; Dawson St., Broadway to Grand View, 15-in. pipe; Conger St., Avon to Burton Sts., 12-in. pipe; Riehl St., Grand View to Avon St., 12-in. pipe; Dawson St., Grand View to Avon St., 12-in. pipe; Riehl St., Avon to Burton Sts., 10-in. pipe; West Seventh St., Dawson to Burton Sts., 10-in. pipe; West Seventh St., manhole, at Leavitt to Lot 12, Block 5, Johnson's addition, 8-in. pipe. Total, 11,000 ft. of pipe.

FORT DODGE, IOWA.—Bids will be received until July 11 by W. L. Tang, City Clk., for constructing storm water sewers in several streets and alleys.

WINTERSET, IOWA.—The W. K. Palmer Co., Kansas City, Mo., has been engaged to prepare plans for a sanitary sewer system here.

CROOKSTON, MINN.—Bids are asked until 8 p. m., July 12, by A. M. Childs, City Clk., for furnishing necessary labor and material for the construction of a sewer including 760 lin. ft. of 12-in. vitrified clay pipe sewer and 750 lin. ft. of 9-in. in Stuart Ave. and Hubbard St. J. E. Carroll is City Engr.

ALBERT LEA, MINN.—ILLSTRUP & OLSON, of Minneapolis, secured contract on June 21 for constructing lateral sewer No. 2 at $7,195.

HERINGTON, KAN.—Bids will be received until July 15 instead of July 12, as noted last week, by G. W. Krause, City Clk., for constructing a sewer system. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

O'NEILL, NEB.—Bids are asked until 8 p. m., July 13, by H. J. Hammond, City Clk., for furnishing material and labor necessary for the construction of a sanitary sewer system. Consolidated Engineering Co., 640 Bee Bldg., Omaha, Neb., are Engrs.

CRETE, NEB.—Contract for constructing the sewer system has been awarded to LANA CONSTRUCTION CO., of Harlan, Iowa, at $37,047. There will be about 19,071 lin. ft. of 8-in., 10,376 lin. ft. 10-in., 5,776 lin. ft. 12-in., and 4,983 lin. ft. 30-in. pipe sewers. Other bids were: J. J. Hanighen, of Omaha, $46,174; Inter-Mountain Bridge & Construction Co., Tecumseh, Neb., $42,370; Edward Donahue & J. Peterson, Omaha, $44,774; Katz-Craig Construction Co., Omaha, $45,342. Bids were opened on June 20. P. A. Edquist is Engr., N. Y. Life Bldg., Omaha.

ALLIANCE, NEB.—Bids are asked by F. W. Irish, City Clk., until noon, July 11, for the construction of sanitary sewer laterals in various districts.

ELLENDALE, N. DAK.—Bids will be received until July 11 by John King, City Audr., for constructing a sewage disposal plant, consisting of a sewage tank of about 50,000 gallons' capacity, a sludge bed, 20 × 30 ft., etc. W. L. Richards is Engr., Cresco.

BRIDGEWATER, S. DAK.—WILLIAM WELSH has been awarded contract by the City Council for the construction of a complete sewer system.

*ST. LOUIS, MO.—The Board of Public Improvements has awarded contract to the UNIVERSAL CONSTRUCTION CO., 612 North Third St., St. Louis, for the River Des Peres foul water sewer, Section 2, at $604,519. Bids were received on June 21. List of bidders noted last week. W. B. Dryden is Secy. Bd.

*AMARILLO, TEX.—Bids will be received by the City Secretary until 1 a. m., July 20, for furnishing materials and labor for construction of sanitary sewers. The work will consist of approximately 11,100 ft. 15-in., 8,155 ft. 12-in. and 30,835 ft. 6-in. diameter sewer pipe.

ELK CITY, OKLA.—Plans and specifications for sewage purification works to cost about $12,000 have been accepted and bids are asked until July 11. F. H. Lancashire, of Dallas, Tex., is Engr.; R. J. Carlile is City Clk.

MANGUM, OKLA.—The city has voted $20,000 of bonds for the extension of a sewer system.

SEATTLE, WASH.—The contract for laying sewers in First Ave. South and other streets has been awarded to NELSON & CARLSON, at $14,874.

SAN FRANCISCO, CAL.—The Board of Public Works on June 22 let contract for constructing the Seventh St. sewer to the METROPOLITAN CONSTRUCTION CO., of San Francisco, at $159,000.

PORTERVILLE, CAL.—About twelve miles of vitrified salt glazed pipe lateral sewers will be laid and several miles of mains constructed. Estimated cost, $40,000.

SALT LAKE CITY, UTAH.—Bids were opened on June 21 by the Board of Public Works for constructing sewer extension No. 251, as follows: A. A. CLARK, 632 Judge Bldg., $44,120 (awarded contract); James Kennedy Construction Co., $44,418; J. D. Hanley, $46,079; McKay & Reed, $46,906; Charles U. Heuser, $47,349; Moran Construction Co., $53,408; Tibby & Forbes, $59,910.

POCATELLO, IDAHO.—We are officially advised that the city on June 28 voted in favor of issuing $164,782 of bonds for trunk line sewers. W. A. Samms is City Engr.

GRANGEVILLE, IDAHO.—Contract for installing the improved sewer system here has been awarded to DIBLER & MOORE, of Tacoma, Wash., at $39,000. The contractors will commence work within the next two weeks. The following firms also bid: J. F. Costello, $51,000; John Fife, $53,000; J. C. Broad, $49,956; Smith & Nickerson, Lewiston, $49,317.

MONTREAL, QUE.—Bids are asked by L. N. Senecal, Secy.. Bd. Comrs., until noon, July 8, for a sewer in Sherbrooke St., Sixth section from Drummond to Guy Sts.

OAKVILLE, ONT.—F. Aird Murray, of Toronto, is preparing plans for a sewage disposal plant for this town.

STEELTON, ONT.—Bids are asked by J. Robinson, Town Clk., until 8 p. m., July 13, for labor and material for the construction of sewer system and appurtenances. Length of sewer, about six miles.

MOOSE JAW, SASK.—Bids are asked until 8 p. m., July 18, by W. F. Heal, City Clk., for Contract "A." supplying material and constructing a sewage disposal plant complete, and laying trunk sewer. Noted incorrectly last week under Saskatchewan, Sask.

GARBAGE DISPOSAL.

(denotes that this work is advertised in Engineering News.)*

ELIZABETH, N. J.—Wade Bros. have submitted the lowest bid to the city for garbage removal at $34,000. Other bidders were: Thomas Viscount, $42,000; Louis Rusciano, $42,000; Nicola La Corte, $53,597.

McKEES ROCKS, PA.—The Council on June 24 awarded contract to the PITTSBURG REDUCTION CO., Park Bldg., Pittsburg, at $4,880, for garbage removal.

TOLEDO, OHIO.—Fred. C. Alber, of Cleveland, who was awarded a 10-year contract for the disposal of garbage here, will erect a plant. Estimated cost, $125,000.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

CONCORD, N. H.—We are officially advised that the following bids were received by H. C. Hill, State Engr., on July 1, for constructing gravel roads in the towns of (a) Northumberland, (b) Campton and (c) Enfield: (a) Stewart and Snodgrass, Berlin, N. H., $7,379; Osgood Construction Co., Nashua, N. H., $8,017. (b) Ahern Bros., Plymouth, N. H., $16,867; Osgood Construction Co., Nashua, N. H., $14,681. (c) P. A. McIntyre, Suncook, N. H., $16,303; Lane Construction Corporation, Meriden, Conn., $16,829.

Bids are asked until 1 p. m., July 15, by H. C. Hill, State Engr., Concord, for native stone paving to cost $5,000.

BOSTON, MASS.—Bids are asked by R. C. Hollyday, Ch. of Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., July 23, for paving between the rails of a crane track at the U. S. Navy Yard, Boston. Specifications are on file at the office of Engineering News, New York.

FALL RIVER, MASS.—The contract for laying Hassam pavement in Second St., from Morgan to Rodman St., and in Pine St. from Rock to North Main St. has been awarded to the SIMPSON BROS. CORPORATION, 166 Devonshire St., Boston, the only bidder. Approximately 2,300 yds. of the pavement will be laid at $2.10 per sq. yd.

HARTFORD, CONN.—Contracts for the construction of State roads, bids for which were received on June 24, have been awarded by the State Highway Commissioner as follows:

Town of Plainville, 1,485 lin. ft. of macadam on West Main St., to the Board of Selectmen, Plainville, $1.20 per lin. ft. for macadam; $2 for telford. Other bidders were: Donahue Bros., Middletown, Conn., $1.44 and $1.90; A. C. Sternberg & Sons, West Hartford, Conn., $1.69 and $2.60.

Town of Ellington, First Section, 2,280 lin. ft. gravel-telford on Ellington Ave., including one 15-in. tile culvert and a reinforced-concrete arch culvert, to THOMAS KEARNEY, Meriden, Conn., 98 cts. per lin. ft. for gravel, $1.72 per lin. ft. for telford, 65 cts. per lin. ft. for rubble drain, and 65 cts. per sq. yd. for cobble gutters. Other bidders were: A. Brazos & Sons, Middletown, Conn., $1.54, $1.95, 80 cts., and 60 cts.; O. T. Benedict, Pittsfield. Mass., $1.79, $2.39, 80 cts., and 80 cts.; Amos Bridge's Sons, Inc., Hazardville, Conn., $1.62, $2.52, $1, and 60 cts.; Clayton T. Curtiss, Glastonbury, Conn., $1.35, $2.40, $1.10, and 85 cts.

Second Section, 4,600 lin. ft. gravel-telford on Maple St., including three 12-in., three 15-in. and one 18-in. tile culverts, to THOMAS KEARNEY, Meriden, Conn., 98 cts. per lin. ft. for gravel, $1.72 per lin. ft. for telford, 65 cts. per lin. ft. for rubble drain, 65 cts. per sq. yd. for cobble gutters. Other bidders were: A. Brazos & Sons, Middletown, Conn., $1.95, $2.30, 80 cts. and 60 cts.; O. T. Benedict, Pittsfield, Mass., $1.99, $2.59, 80 cts., and 80 cts.; Amos D. Bridge's Sons, Inc., Hazardville, Conn., $2.02, $2.72, $1, and 60 cts.; Clayton T. Curtis, Glastonbury, Conn., $1.35, $2.35, $1.10, and 85 cts.

Town of Seymour, First Section, 4,778 lin. ft. gravel-telford on North Main St., including three 12-in. and one 15-in. tile culverts, to FRANK BRAULT and JOHN J. DAVIDSON, Ansonia, Conn., 85 cts. per lin. ft. for gravel, $1.60 per lin. ft. for telford, and 60 cts. per lin. ft. for rubble drain. Other bidders were, B. D. Pierce, Jr., Co., Bridgeport, Conn., $1.19, $1.79 and 60 cts.; E. G. Pardee, Bethany, Conn., 88 cts., 65 cts. and 95 cts.; O. T. Benedict, Pittsfield, Mass., $1.39, $1.99, and 80 cts.; E. N. [illegible] arke, Milford, Conn., 89 cts., $1.55, a[illegible] $1; Roger Kennedy, Middletown, Conn[illegible] 24, $2.10 and $1; Goodman & Trumb[illegible] Litchfield, Conn., $1.21, $2, and $1.

Second Section, 3,005 lin. [illegible] gravel-telford on North St., including [illegible] 12-in. and two 15-in. tile culverts, to E. [illegible] PARDEE, Bethany, Conn., 88 cts. per lin. [illegible] for gravel, $1.53 per lin. ft. for telford, a[illegible] cts. per lin. ft. for rubble drain. Other [illegible] ers were, Frank Brault and John J. Dav[illegible] Ansonia, Conn., 91 cts., $1.60 and [illegible] B. D. Pierce, Jr., Co., Bridgeport, [illegible] $1.39, $1.94 and 65 cts.; O T. Bened[illegible] Pittsfield, Mass., $1.39, $1.99 and 80 cts.; [illegible] N. Clarke, Milford, Conn., 89 cts., $1.55 a[illegible] $1; Roger Kennedy, Middletown, Conn., $[illegible] $2.25 and $1; Goodman & Trumbull, Lit[illegible] d, Conn., $1.48, $2.20 and $1.

Town of Kent, First Section, [illegible] 5 lin. ft. of grading on the Poughkee[illegible] Tpk., to FRANK FABBRI, Litchfield, [illegible] $6,625, with 90 cts. per lin. ft. extra fo[illegible] ford and $1.40 for rubble drain. Other [illegible] rs were, Merritt & Bush, Stamford, Con[illegible] $6,971.00, 47 cts. and $1; E. G. Pard[illegible] Bethany, Conn., $11,111.25, 65 cts. and 9[illegible]; Goodman & Trumbull, Litchfield, C[illegible] $7.7[illegible], 80 cts. and $1.10.

Second Section, 1,840 lin. ft. g[illegible] g, same road, to FRANK FABBRI, Litch[illegible] Conn., $6,270, with 90 cts. per lin. ft. e[illegible] for telford, and $1.46 for rubble drain. [illegible] her bidders were, Merritt & Bush, Stam[illegible] Conn., $6,888, 55 cts. and $1; Goodman & [illegible] rumbull, Litchfield, Conn., $9,498, 80 cts. a[illegible] $1.10.

Third Section, 1,600 lin. ft. on [illegible] Flanders Road, to E. G. PARDEE, [illegible] Bethany, Conn., $1,584, with 65 cts. per li[illegible] ft. extra for telford and 95 cts. for ru[illegible] drain. Other bidders were, Frank Fabbri, [illegible] tchfield, Conn., $1,750, 90 cts. and $1.40; [illegible] oodman & Trumbull, Litchfield, Conn., $2[illegible] 7.50, 80 cts. and $1; Merritt & Bush, [illegible] tamford, Conn., $2,160, $1.85 and $1.

Town of Stratford, 5,150 lin. ft. [illegible] macadam on the Milford Rd., to B. F. MA[illegible] AN, New London, Conn., $1.50 per lin. ft. [illegible] r macadam, $2.30 for telford, $1 for rubble drain and $2.41 per sq. yd. for brick work. Other bidders were, O. T. Benedict, Pittsfield, Mass., $1.90, $2.50, 80 cts., $2.50; E. N. Clarke, Milford, Conn., $1.90, $2.48, $1 and $3; B. D. Pierce Jr., Co., Bridgeport, Conn., $1.71, $2.31, 60 cts., and $2.50.

These bids were also received for the construction of 2,300 lin. ft. macadam-telford on the Milford Tpk. in the town of Milford, but contract was not awarded: B. D. Pierce, Jr., Co., Bridgeport, Conn., $1.84 for macadam, $2.57 for telford and 70 cts. per lin. ft. for rubble drain; O T. Benedict, Pittsfield, Mass., $1.80, $2.40 and 80 cts.; Donahue Bros., Middletown, Conn., $1.64, $2.34 and $1.10; E. N. Clarke, Milford, Conn., $1.60, $2.20 and $1.

HARTFORD, CONN.—The contract for the construction of 2,300 lin. ft. of macadam telford road on the Milford Turnpike, Milford, Conn., bids for which were received on June 14, has been awarded to E. N. CLARKE, of Milford, Conn., for $1.60 per lin. ft. for macadam, $2.20 for telford and $1 for rubble drain.

Bids for the construction of a combination macadam and Belgian block road on State St., New Haven, Conn., approximately 9,628.4 sq. yds., were received by the State Highway Commissioner, July 1, as follows: (a) Macadam, (b) telford, (c) Belgian blocks. Lawrence Bruce, North Haven, Conn., (a) 67 cts., (b) 90 cts., (c) 75 cts.; Robert Daly, New Haven, Conn., (a) 85 cts., (b) $1.70, (c) 65 cts.; O. T. Benedict, Pittsfield, Mass., (a) $1.05, (b) $1.75, (c) 95 cts. The macadam-telford contract was awarded to LAWRENCE BRUCE and the Belgian block work to MR. DALY.

Plans for the improvement of state roads have been received by the State Highway Commissioner from Albert S. Brainard, Div. Engr., as follows: Towns of Glastonbury and Marlboro on the Hartford-Norwich turnpike, about Twelve miles; town of Simsbury, Main St., 4,300 lin. ft.; East Granby, two sections on the Hartford-Westfield road, 6,400 lin ft.; town of Windsor, two sections on the Hartford-Springfield turnpike, about 11,700 ft.; town of Rocky Hill, on the Dividend road, 7,000 ft.

NEW YORK, N. Y.—Bids are asked by Cyrus C. Miller, Pres. Borough of the Bronx, until 11 a. m., July 14, for paving with asphalt blocks on a concrete foundation the roadway of Concord Ave., from 149th to 152d St., and setting curb where necessary.

NEW YORK, N. Y.—Bids are asked by Alfred E. Steers, Pres. Boro. of Brooklyn, until 11 a. m., July 20, for regulating, grading and paving various streets in Brooklyn.

*WATERTOWN, N. Y.—Bids are asked by E. W. Sayles, City Engr., until 8 p. m., July 15, for the construction of about 6,000 sq. yds. of pavement in High St., together with the necessary [illegible] bing, grading, culverts, sewers, catch basins, and all other work in connection therewith for the proper completion of the pavement. Bids will be received for each of the following kinds of pavement: Vitrified block pavement on concrete base.; wood block pavement on concrete base.

CORTLAND, N. Y.—Bids ar[illegible] asked by Dr. A. S. Draper, State Comr. [illegible] Education, Capitol, Albany, N. Y., unt[illegible] p. m., July 12, for the following wor[illegible] the State Normal School at Cortlan[illegible] N. Y.: (1) For improvement to the wa[illegible] supply system; (2) for electric light[illegible] ing and fixtures; (3) for an addition[illegible] luding construction, heating and plu[illegible] ng; (4) for renewing boiler equipment. [illegible] B. Ware is State Arch., Albany.

WOODBURY, N. J.—The [illegible] BERT PAVING & CONSTRUCTION [illegible] 15th and Chestnut Sts., Philadelphia, [illegible] a., has been awarded the contracts for [illegible] building of new roads from Woodbur[illegible] o Clarksboro and from Swedesboro to Au[illegible] rn by the Bd. of Freeholders of Glouc[illegible] r Co. Cost, $103,851.

ATLANTIC CITY, N. J.—We are officially advised that the contract has been let to the UNITED PAVING CO., of Atlantic City, N. J., for 18,770 sq. yds. of bitulithic paving.

PITTSBURG, PA.—The County Commissioners on June 27 awarded the following contracts: FOLEY BROS., Rochester Road, for building what is known as the Perrysville Extension No. 1, which runs from Allegheny city line to Keown's roadhouse, the [illegible] being $39,753. Other bids were: J. [illegible] Howley, 237 Fourth Ave., $42,017; Ott Bros., 414 Washington Ave., $45,224; Henry Grabing, $46,576. The contract for the building of the Turtle Creek and Munroeville Road was awarded to W. E. HOWLEY, 237 Fourth Ave., for $22,398. The other bids were: Foley Bros., $26,678; R. H. Cunningham, $26,893; McLaughlin Contracting Co., $31,676; Henry Hileman, $32,809; [illegible]len & Dailey, $34,296; J. F. Howley, $[illegible]293; J. Ancaroni & Co., $39,525; A. [illegible]othey & Co., $41,975. The contract for furnishing cement for bridges, etc., for the County Engineer for the present year was awarded to the UNIVERSAL PORTLAND CEMENT CO., Frick Bldg., at $1.22 per bbl.

MOUNT PLEASANT, PA.—We are officially advised that bids were received at the office of M. A. King, Secy. of Mount Pleasant Borough Council, on June 24, for grading and curbing South Diamond and Bridgeport Sts. and paving the same with vitrified brick. Bids will be compared on the basis of the following approximate estimates of the work to be done: Bridgeport St.—Excavation, 2,512 cu. yds.; paving, 3,483 sq. yds; straight curb, 2,592 lin. ft.; curb returns, 12[illegible] lin. ft.; rough curb, 168 lin. ft. South Diamond St.—Excavation, 1,870 cu. yds.; paving, 3,150 sq. yds; straight curb, 2,070 lin. ft.; curb returns, 164 lin. ft.; rough curb, 240 lin. ft. The contract has been let to T. PITTRO, of Morgantown, W. Va.

AVALON (Allegheny Post-office), PA.—Bids are asked by the McBride Surveying & Engineering Co., Ltd., Boro. Engrs., Fitzsimons Bldg., Pittsburg, Pa., until 4 p. m., July 12, for grading, curbing and paving Chestnut St., from Taylor Ave. to Orchard Ave. The approximate quantities are as follows: 1,020 cu. yds. of excavation, 1,550 lin. ft. of dressed curb, 110 lin. ft. of rough curb, 150 lin. ft. of curbing to be reset, 2,270 sq. yds. paving, 200 sq. yds. repaving.

INGRAM (Allegheny Post-office), PA.—Bids are asked until 7.30 p. m., July 7, by D. H. Hainer, Boro. Clk., 54 McKee St., Ingram, for paving Center Ave., from Hodgson Ave. to Chapman St. and Center Ave., from Short St. to Dallas Ave. John F. Murry is Boro. Engr.

WADESBORO, N. C.—E. P. LINDSAY, of Portsmouth, Va., has secured a contract for macadam paving and constructing granolithic sidewalks in Wadesboro, at $30,000.

ATLANTA, GA.—Bids are asked by the Mayor and General Council until 3 p. m., July 18, for paving the following streets: Marietta St., from Tabernacle Pl. to North Ave., approximately 17,000 sq. yds., with creosoted blocks; Forsyth St., from Marietta St. to Luckie St., approximately 3,300 sq. yds., with creosoted blocks; DeKalb Ave., from Moreland Ave. to Maysons Ave., approximately 12,000 sq. yds., with macadam with asphalt binder. R. M. Clayton is City Engr.

*LAFOLLETTE, TENN.—Bids are asked until July 25 by the Board of Public Works of Lafollette for the construction of sewer and concrete sidewalks.

MARTIN'S FERRY, OHIO.—The following bids were received by the County Commissioners on June 18 for the improvement of Flushing Road: PETRIE, ARTHUR & TURNER, of Logan, $15,299 (awarded contract); J. P. Warnock, Cadiz, $15,900; Moore & Stahl, St. Clairsville, $18,869; Rosser & Maloney, Bellaire, $16,000; Dixon & Pickett, Martin's Ferry, $16,369.

COLUMBUS, OHIO.—Contracts for road improvement in Franklin County have been awarded by the Board of County Commissioners as follows: Westerville Road, north from Linden Heights to the Mifflin and Blendon township line, macadam unsurfaced road to JAY & R. E. KEYS, of Westerville, Ohio., at $20,403; Johnstown pike from Greenlawn Ave. to the East Frank Road, 1¾ miles, to E. J. ROGERS & CO., Columbus, $9,475. The tarvia surfacing of this road was awarded to the BARRETT MFG. CO., at $2,970, making the total cost $12,445; Delaware and Franklin county line road from the Columbus and Worthington pike to the Wilson pike, macadam unsurfaced, ¾ mile, to W. O. JEWETT, of Worthington, at $3,859.

The Director of Safety of Columbus on June 24 awarded contracts for street improvements and sewers as follows: Improving Schiller St. from Parsons Ave. to 17th St. to WILLIAM M. BRAHAM, $47,147. Other bidders were: With brick, William E. McHugh, $46,778; H. J. Shaw, $47,020; D. E. Sullivan & Son, $47,781; Patterson & Son, $49,165; A. G. Pugh, $49,431, and Budd & Barting, $57,158. The contract provides for paving with asphalt. Mohawk St. from Frankfort St. to Reinhart Ave., WILLIAM M. GRAHAM, with Portsmouth block and tar filler, $10,029. Other bidders were: A. G. Pugh, $10,876; D. E. Sullivan & Son, $10,550, and Geigele & Garnes, $10,457. Findlay Ave. from Maynard Ave. to Mock Road, JOHN C. BEASLEY, with brick blocks, $16,057. Other bidders were: William M. Graham, $16,9[illegible]; D. E. Sullivan & Son, $17,212; Budd & Bartling, $17,226; A. G. Pugh, $18,9[illegible]. Rhoades Ave. from Franklin Park South to Bryden Road, asphalt, A. G. PUGH, $11,117. Other bidders for brick paving were as follows: J. C. Beasley, $[illegible]32; William M. Graham, $10,177.

Bids will be received by H. S. Holton, Dir. of Pub. Service until July 18 for furnishing approximately 100 tons of refined asphalt.

*CALDWELL, OHIO.—Bids are asked by Hugh F. Neuhart, Village Clerk, until noon, July 22, for approximately 7,750 sq. yds. of paving and 4,500 lin. ft. of curb.

LISBON, OHIO.—Bids will be received by the Board of Commissioners of Columbiana County until noon, July 14 (date changed from July 7) for grading and paving with brick 1.5 miles of roads in Fairfield Township, under the provisions of the state highway law. J. C. Wonders is State Highway Comr., Columbus, Ohio. Estimated cost, $20,000.

MILLERSBURG, OHIO.—Bids will be received at the office of the Commissioners of Holmes County, at Millersburg, until noon, July 13, for grading and paving with bituminous brick .86 miles of road in Hardy Township, under the provision of the state highway law. Estimated cost, $11,783. James C. Wonders, Columbus, Ohio, is State Highway Comr.

DAYTON, OHIO.—Bids will be received at the office of the Commissioners of Montgomery County, at Dayton, until noon, July 15 for grading and macadamizing 0.852 miles of road in Van Buren Township, under the provisions of the state highway law. Estimated cost, $11,593. James C. Wonders, Columbus, Ohio, is State Highway Comr.

WAPAKONETA, OHIO.—The ASPHALT BLOCK PAVEMENT CO., Ohio Bldg., Toledo, has been awarded the contract for paving Willipe St., in this city. There were 19 bids submitted for the work. Work will be commenced at once and the street is to be completed on or before Oct. 10.

BERLIN CENTER, OHIO.—Bids are asked until noon, July 20, by the Township Trustees for grading the east and west center road from Berlin Center west. J. L. Wilsdorf is Township Clerk.

TOLEDO, OHIO.—Bids are asked by the Commissioners of Lucas County until 10 a. m., July 15, for repairing the following macadam roads: Lewis Ave., from Sylvania Ave. to north line West Toledo addition, Washington Township; Monroe St., stone road, No. 25, from the east corporation line to Division St., Sylvania Village. Charles J. Sanzenbacher is County Audr.

LOCKLAND, OHIO.—Bids will be received by the Council of the Village of Lockland, Hamilton County, Ohio, at the office of C. E. Troy, Village Clerk, 411 Mill St., until noon, July 18, for the furnishing of the necessary labor and material for the improvement of Wyoming Ave., from the west line of Wayne Ave. to the east line of the right-of-way of the Cincinnati, Hamilton & Dayton Ry., by grading, constructing concrete curbs and gutters, crosswalks and paving the right-of-way with vitrified brick and constructing the necessary storm sewers therein.

CARROLLTON, OHIO.—COSS & MYERS, of Wheeling, W. Va., have secured the contract for paving, curbing and constructing sewers here, at about $40,000.

FERNBANK, OHIO.—Bids are asked by the Board of County Comrs. until noon, July 15, for improving Short Ave., through the village of Fernbank, Miami Township. Fred Dreilis, Cincinnati, Ohio, is Clerk.

OBERLIN, OHIO.—Bids are asked by H. T. Marsh, Village Clerk, until noon, July 16, for paving Morgan St., from Main St. to Professor St.

CRAWFORDSVILLE, IND.—Frederick B. Robinson, City Clerk, has been instructed to advertise for bids for paving Mills Place Boulevard, from the College Campus to Crawford St., and constructing a cement curb and gutters and cement walks and curbing the plaza in the middle of the street; also, for improvement of Gipson St., from Liberty St. to Jenison St., and the construction of cement walks on both sides; also for improvement of Grant Ave., from Market St. to the Pacific & Eastern Ry., by paving the roadway and constructing cement curbs and sidewalks.

FORT WAYNE, IND.—Board of Public Works is preparing to ask for bids for paving Clinton, Berry and Barr Sts., with asphalt and the gutters with Metropolitan brick.

INDIANAPOLIS, IND.—The Park Board has awarded a contract to the MOORE-MANSFIELD CO. for the construction of a boulevard along the north bank of Fall Creek.

The Board of Public Works has ordered plans on which bids will be asked for the paving of New Jersey St., from 20th St. to 30th St., with asphalt; Linwood Ave., from New York St. to Michigan St., with bitumass; cement walks in Laurel, 16th and Ohio Sts., and local sewers in 33d St.; local sewer in alley between Evison and Spruce Sts., and local sewer in alley east of Olive St.

DETROIT, MICH.—The Common Council of Detroit directed the Board of Public Work, J. J. Haarer, Comr., City Hall, to advertise for bids for paving the following streets: Sheppard Ave., with sheet asphalt, cost estimated, $1,983; Campbell Ave. with cedar block, estimated cost, $2,100; Hendrie Ave. with cedar, estimated cost, $10,680; Hudson Ave. with cedar, estimated cost, $2,340; Waterloo St. with cedar, estimated cost, $2,496; also for paving three alleys with brick, estimated cost, $9,420. All on concrete foundations with Medina, Borea or other approved curbing. The Board has awarded the following contracts for paving the following streets: Eighth St., to F. PORATH & SON, 878 25th St., at $13,631; Ferry Ave., at $5,841; 28th St., at $5,777, and State St., at $1,783, all with vitrified brick on concrete; to JAMES HANLEY, Penobscot Bldg., for paving Chestnut St., with brick, at $9,474, and to E. E. CURRIE, Penobscot Bldg., for paving Cass Ave. with granite block.

PONTIAC, MICH.—At the Common Council meeting held on June 27 the contract for the brick for 7,400 yds. of paving was let to the DETROIT VITRIFIED BRICK CO., at 74 cts. a yard. Bids were opened for the construction of cement sidewalks and the contract for the work for the east side of the city was let to JAMES G. FOLEY, at 8 cts. The lowest bid for the west side was that of Robert J. Alderton, at 9½ cts. The west side work will be readvertised.

BLOOMINGTON, ILL.—The ANDREWS ASPHALT PAVING CO., of Hamilton, Ohio, has secured contract for 10,000 yds. of asphalt resurfacing on old brick pavement, at $1.28 per sq. yd. Bids were received on June 22.

OTTAWA, ILL.—The ILLINOIS CEMENT CONSTRUCTION CO., of Springfield, Ill., has been awarded the contract conditionally for paving at the following bid: 40,103 sq. yds. of brick paving, $1.60 per sq. yd.; 7,397 ft. of cement concrete curb, 28 cts.; 642 ft. of cement concrete protecting curb, 20 cts.; 1,157 ft. of cement concrete crossing curb, 30 cts.; 11,845 ft. of curb reset, 14 and 15 cts.; total, $68,771. W. H. Irwin is Engr.

STEVENS POINT, WIS.—We are officially advised that from six to ten miles of street paving will be done under the supervision of the Board of Public Works. Estimated cost, $25,000. T. H. Cauley is City Engr.

MADISON, WIS.—The ANDREWS ASPHALT PAVING CO., of Hamilton, Ohio, has been awarded the contract for the asphalt pavement on University Ave., from Charter St. to Francis St.; cost, $44,662. Other bids received were: J. F. Hill, Chicago, $47,922; White Construction Co., Milwaukee, $46,877.

SUPERIOR, WIS.—WALSH & JOHNSON have been awarded the contract for paving John Ave., from Winter St. to Third St., with brick, at $26,686.

OSCEOLA, IOWA.—Bids will be received until July 14 by W. N. Temple, City Clerk, for constructing approximately 13,000 sq. yds. of paving and 8,000 lin. ft. of cement curbing during the year 1910.

*MARSHALLTOWN, IOWA.—Bids are asked by the City Clerk until 8 p. m., July 18, for paving certain streets and alleys. The work comprises approximately 12,700 sq. yds. of brick block paving, and 4,800 lin. ft. of concrete curb.

SHERIDAN, WYO.—We are officially advised that bids were received on June 27 by the City Council for paving and constructing storm sewers on certain streets and avenues, about 69,064 sq. yds. of paving. James J. Withrow is City Clerk. The contract has been awarded to JAMES KENNEDY, of Fargo, N. Dak., at $239,600.

BILLINGS, MONT.—JAMES KENNEDY, of Fargo, N. Dak., has secured the contract for 24,644 sq. yds. of creosoted block pavement, at $3.35 per sq. yd.; 32,040 sq. yds. of vitrified brick pavement, at $3.48.

*AMARILLO, TEX.—Bids will be received at the office of Sam J. Brown, City Secy., until 3 p. m., July 25, for the construction of approximately 80,000 sq. yds. of pavement. Each bidder shall bid separately on (a) bitulithic paving, (b) vitrified brick paving, (c) sheet asphalt, (d) rock asphalt.

PARIS, TEX.—Bids are asked by Judd W. Wright, City Secy., until 7 p. m., July 11, for paving North 18th St., from the north side of Bonham St. to the north boundary line of Graham St., and on Graham St., from the east boundary of 18th St. to the west boundary line of 13th St., with rock asphalt, bitulithic or other bituminous pavement. E. H. McCuistion is Mayor.

DALLAS, TEX.—The Board of Municipal Commissioners has ordered the repaving of Elm St., from Ervay St. to the Houston & Texas Central R. R. The City Secretary has been ordered to call for bids.

*DENISON, TEX.—Bids are asked by the Commissioners Court of Grayson County, Tex., until 11 a. m., Aug. 10, at the office of the Court in Sherman, Tex., for the construction of approximately 65 miles of macadam roadway in Road District No. 1, of Grayson County, Tex. The district is situated in the north central part of Grayson County, in and about the City of Denison. H. R. Wallace is County Audr., Sherman, Tex.; J. C. Field is Engr.-in-Charge, Denison.

DENVER, COLO.—Bids were received on June 16 by the Board of Public Works for grading and concrete paving Alley Paving District Nos. (a) 25, (b) 26 and (c) 27, as follows: NATIONAL CONSTRUCTION CO., Empire Bldg., (a) $15,506, (b) $11,092, (c) $17,160 (awarded contract); Municipal Construction Co., (a) $15,631, (b) $11,181, (c) $17,169.

The Board of Public Works has established North Side Improvement Districts 13, 14, and 15. The improvements in District 13 consist of grading roadway and sidewalk areas, constructing concrete curb and gutter, and constructing wood crosswalks and culverts; estimated cost, $79,516. The improvements in District 14 consist of similar work including surfacing roadways with smelter slag and disintegrated granite, and constructing wood culverts; estimated cost, $20,256; and in District 15 the same, including constructing concrete sidewalks; estimated cost, $51,970. Bids will soon be asked. Fred. Lockwood is Secy.

SEATTLE, WASH.—R. H. Thomson, City Engr., has reported the estimated cost of the following street improvements: University St., asphalt paving, $28,000; East John St., asphalt paving, $2,500; Second Ave., repaving with brick, $5,200; Belvidere Ave., grading, $46,600; 45th Ave., S. W., grading, $81,300; West Oregon St., grading, $43,000; 20th Ave., N. E., concrete walks, $20,200; Republican St., planking, $2,750.

FORT WARD (Port Blakeley post-office), WASH.—Bids are asked by Capt. E. C. Long, Constr. Q. M., Arcade Annex, Seattle, Wash., until 11 a. m., July 11, for constructing roads, walks, drains, crossings, etc., at Fort Ward.

FORT WORDEN (Port Townsend post-office), WASH.—Bids are asked by Capt. E. C. Long, Constr. Q. M., Arcade Annex, Seattle, Wash., until 11 a. m., July 12, for constructing roads, walks, grading, etc., at Fort Worden.

CONCRETE, WASH.—Bids will be received by the City Clerk until July 19 for laying 139,650 ft. of wooden sidewalks, 19,850 sq. ft. of concrete walk, etc.

NORTH YAKIMA, WASH.—Contracts for paving have been awarded as follows: INDEPENDENT ASPHALT PAVING CO., of Seattle, asphalt on Naches Ave. and A St., at $129,013; the ANDERSON CONSTRUCTION CO., of Tacoma, with brick on Chestnut St. and A St., at $26,226 and $28,411, respectively.

CHEHALIS, WASH.—It is proposed to pave Chehalis Ave. at a cost of $44,000, Main St. at a cost of $30,000, Market St. at a cost of $25,000, Fulson St., cost $25,000, and Pacific Ave., cost $21,000. C. E. Pruitt is City Clerk.

OLYMPIA, WASH.—We are officially advised that bids were received on June 21 by the Highway Board for clearing, grubbing, grading and draining State Aid Road No. 78, known as the Everett-Bothell Road in Snohomish County; for clearing, grubbing, grading and draining State Road No. 2, Stevens County; for surfacing with gravel or crushed rock State Road No. 5, Lewis County, Wash. Henry L. Bowlby is Secy. The bids on Road No. 78 were held up. The contract for Road No. 2 has been let to J. M. NOBLE & CO., of Spokane, Wash. The contract for Road No. 5 has been let to YOUNG & LOUDES, of Chehalis, Wash.

PORTLAND, ORE.—We are officially advised that contracts have been let to the WARREN CONSTRUCTION CO., of Portland, for 30,043 sq. yds. of bitulithic pavement, and to the PACIFIC BRIDGE CO., of Portland, for 8,928 sq. yds. of bitulithic.

ROSEBURG, ORE.—At a special meeting of the City Council held on June 21 the contract for the paving of 15 blocks in this city was awarded to the CLARK HENRY CONSTRUCTION CO., of Sacramento, Cal., on a bid of $94,856. This company has a large plant at Medford, which it will move to this city, and active work will be commenced not later than July 15.

LOS ANGELES, CAL.—The contract for constructing the Hollywood-Toluca Road has been awarded by the Board of Supervisors to A. C. ST. JOHN, H. W. Hellman Bldg. His bid approximated $39,048, while the engineer's estimate for the road was $37,355, but because the season for beginning road work is becoming advanced, the commission recommended that the contract be let, even though the estimate is exceeded. For the same reason it recommended that the contract for the Valley Road, extending from Whittier Road to Downey, be awarded to H. H. ROGERS. His bid was about $35,393, which is about 5% in excess of the estimate. The contract for the grading and culverts, but not laying the macadam, on the Redondo-Wilmington Road, was let to T. D. DUNGAN for $10,850.

The Board of Public Works has awarded the contract to L. N. DAVIES for grading, graveling and constructing cement curb and gutter on Gardner St., at $12,646.

SACRAMENTO, CAL.—Bids will be received by William B. Hamilton, Clerk of the Board of Supervisors of Sacramento County, at its office in the Haub Bldg., 910 Sixth St., Sacramento, until 11.30 a. m., July 9, for the construction of a macadam roadway, with asphaltic oil in upper courses, graded berms and concrete culverts, along the Riverside Road, from Engineer's Station O at the end of the present car tracks, about 900 ft. north of Sutterville Road southerly to Station 158 + 40, a distance of three miles.

WESTMOUNT, QUE.—The Westmount City Council on June 20 approved contracts to the extent of $145,000 to the MINERAL RUBBER CO., of Toronto, Ont., for permanent paving on a number of streets.

WELLAND, ONT.—Contracts for constructing a macadam road between Niagara Falls and Bridgeburg have been let as follows: Two sections to COOK & MENZIE, of Niagara Falls, Ont., and the remainder to H. CAMPAIGNE, of Niagara Falls, at a total cost of $95,000.

NEW WESTMINSTER, B. C.—Bids for paving Second St. were opened in the City Council on June 20. The Hassam Paving Co. was the lowest with a figure of $62,100. The Rudolph S. Blome Co., of Chicago, Ill., was next with $65,690. The Warren Construction Co., of Portland, Ore., was third, quoting $66,903 on bitulithic pavement.

MANUFACTURING PLANTS.

*(*denotes that this work is advertised in Engineering News.)*

NASHUA, N. H.—The Nashua Card, Gummed & Coated Paper Co., of Nashua, N. H., is having plans and specifications prepared by Charles T. Main, Engr. and Mill Arch., 201 Devonshire St., Boston, for additions to its power plant. These will include an extension to the present boiler room, 30 × 42 ft., and the immediate installation of two 78-in. horizontal return tubular boilers of about 186 HP. each. There will be room in the addition for one more boiler to be installed later.

CAMBRIDGE, MASS.—We are officially advised that the additions to the boiler plant of the A. H. Davenport Co. of East Cambridge, Mass., which are being designed by Charles T. Main, Engr., 201 Devonport St., Boston, include two 72-in. horizontal boilers of about 160 HP. each.

BUFFALO, N. Y.—The U. S. Rubber Reclaiming Works will add to its plant at Babcock and Hanna Sts. and the Erie R. R., a mill building, 274 × 60 ft., three stories high, and an office building, of concrete construction. Cost, $55,000. Additional machinery and electric motor equipment for Niagara Falls power will be installed. Frank H. Brewster is Gen Supt., 724 Babcock St.

NORTH TONAWANDA, N. Y.—The Rudolph Wurlitzer Co., manufacturers of musical instruments, will make extensive additions to its plant on the New York Cen-

tral & Hudson River R. R., Erie Ave. and the Creek Road, having acquired 37 acres of land for the purpose.

TONAWANDA, N. Y.—The Martinizing Process Co. will build an addition to its plant, 200 × 42 ft., at Fillmore St. and the Erie R. R. J. H. Martin, Pres.

GREENVILLE, PA.—H. T. Porter, Greenville, Ch. Engr. of the Bessemer & Lake Erie R. R. Co., has been notified that an appropriation of $107,000 has been granted for the proposed round-house, machine shop, and steam heat and washout plant. The round-house will be built of reinforced concrete and work will be started as soon as possible. It will contain 17 stalls, each stall will be 90 ft. deep. Asbestos smoke jackets will be used throughout, and steel doors operated upon hinges. To the south of the round-house there is to be a structure, 70 × 129 ft., in which will be located the air-brake room, a machine shop for work in connection with the round-house, and the lavatories and eating rooms for the men.

ALTAVISTA VA.—The Altavista Cotton Mill Co. will be organized with a capital stock of $300,000 to build a 13,000-spindle and 300-loom plant. A. C. Hutchison, of Charlotte, N. C., will be Pres.-Treas., and Whitted & White, of Charlotte, are the Engrs.-in-Charge. T. V. Elsom, of Altavista, and J. E Law, of Esmont, Va., are among the organizers. The company's buildings will include the main structure, two stories high and 125 × 300 ft., a 1-story boiler and engine room and 50 operatives' cottages, all of brick construction. Electricity will drive the textile machinery.

LUMBERTON, N. C.—The Jennings Cotton Mill, of Lumberton, N. C., is about to begin the erection of its plant which will have 8,000 spindles and accompanying machinery for the production of cotton yarns. These will be hosiery yarns. According to the Boston "Commercial Bulletin," Joseph E. Sirrine, of Greenville, S. C., is the Arch.-Engr.-in-Charge and he is preparing the plans and specifications. These will call for the erection of a 1-story brick building 463 ft. 8 ins. long by 131 ft. wide. Adjoining this will be the steam plant to furnish power for driving the mill. The buildings will cost $50,000 and the machinery probably as much more.

WILLIAMSTON, S. C.—The Williamston Mills, James P. Gossett, Pres., Williamston, S. C., contemplates doubling that plant. This would mean an expenditure of about $500,000 as that is the company's present capitalization. At present the company is operating 32,256 ring spindles and 816 looms, by steam and electric power on the production of print cloth. It is believed that a final decision will be reached soon as to the enlargement.

CHESTER, S. C.—The management of the Wylie Mills, of Chester, S. C., now manufacturing yarns, contemplates building an addition and installing looms so that the present output of yarns can be woven into cloth. The company is capitalized at $150,000 and the managers think of doubling this in order to undertake the enlargement.

FLORENCE, S. C.—The Florence Mfg. Co., of Florence, S. C., has been incorporated for the purpose of manufacturing cotton goods. It will plan the buildings and machinery for a modern mill at once. The capital stock is $200,000 and the incorporators include J. Willard Ragsdale, Joseph W. McGown, J. F. Stackley, John L. Barringer and others of Florence, and Charles A. Smith, of Tim-

SHREVEPORT, LA.—The Texas Co., with local offices at Shreveport, will erect an oil refinery of 30,000 bbls. capacity on 500 acres of land outside of the city limits of Shreveport for refining oil from the Caddo field. The probable cost of the refinery is $500,000. Fifteen steel storage tanks have been completed, each having a capacity of 37,500 bbls., and it is reported that 35 additional tanks will be constructed at once to take care of the oil which is now being piped to the site.

ERWIN, TENN.—It is stated that K. S. Finch and H. B. Heath, of Charlotte, N. C., and H. C. Heath, of Monroe, N. C., are completing their arrangements for the erection of the proposed mill and power plant near Erwin, Tenn. The power plant is to develop 5,000 HP., probably from the flow of the river, and it has been reported that the cotton mill will be planned for an ultimate equipment of 40,000 spindles. The power plant and mill would mean an investment of over $1,000,000.

COLUMBUS, OHIO.—Officials of the Columbus Packing Co. have obtained a permit for a $30,000 addition to be built to the present plant in Hosack St., near the corporation line. The structure will be of concrete and steel, four stories high, and will enable the packing company to nearly double its capacity.

The plans for the addition to the Seagrave Mfg. Co.'s plant of South Columbus have been revised and advertisements for bids have been withdrawn. The revised plans call for a structure of steel and concrete, two stories high and 120 × 150 ft. The new structure will be used for making automobile fire apparatus.

GOSHEN, IND.—The Cleveland-Akron Bag Co., of Cleveland, Ohio, has purchased a 6-acre site in this city on which to erect a factory. Plans and specifications are being prepared.

HUNTINGTON, IND.—Bids will be asked for soon for the construction of two kilns, a cooperage shop and barn by the Ohio & Western Lime Co. Estimated cost, $100,000. The buildings will be erected on the site of similar structures recently destroyed by fire.

BLOOMINGTON, IND.—The Thompson-Sandy Co. is preparing to build a stone mill at Ellettsville on the site of the mill recently destroyed by fire. Bids will be in order as soon as the insurance is adjusted and plans completed.

GARY, IND.—The Elgin, Joliet & Eastern Ry. Co. announces that new shops will be built here and the present shops at Joliet removed here. J. Horrigan, Joliet, is Supt. of Motive Power.

EVANSVILLE, IND.—The Big Six Chair Co., recently organized, will erect a factory building to cost $35,000. Bids will be in order as soon as plans can be completed. Benjamin Bosse is interested.

ASH GROVE, IND.—The Crapp-Reynolds-Taylor Grain Co. will soon ask for bids for the construction of a grain elevator on the site of the elevator recently destroyed by fire. The estimated cost of the new building is $60,000.

ANN ARBOR, MICH.—George Scott, Henning Bldg., is preparing plans and specifications for a 1-story and basement factory, 50 × 150 ft., for the Ann Arbor Motor Co., George Seybold, Secy., 113 Fourth Ave. Cost, $15,000.

WYANDOTTE, MICH.—Varney, Winter & Varney, Equity Bldg., Detroit, are taking figures on a 2-story and basement automobile factory, 320 × 160 ft., for the Sietz Auto & Transmissions Co., of Wyandotte. The building is to be of stock brick, Bedford stone, with composition roof, structural iron, hardwood finish in office and concrete floors. Cost, $30,000.

DETROIT, MICH.—Albert Kahn & E. Wilby, Trussed Concrete Bldg., are taking figures on a 2-story factory for the Packard Motor Co., East Grand Boulevard and Belt Line, S. D. Waldon, Gen. Mgr. Construction will be of reinforced-concrete, with structural iron, composition roof and metal skylight. Building, 320 × 60 ft. Cost, $35,000.

Albert Kahn & E. Wilby, Trussed Concrete Bldg., has let, for the Ford Motor Car Co., James Couzens, Secy., Piquette and Beaubien Sts., the structural iron contract for the 1-story machine building, 96 × 740 ft., to RIVERSIDE BRIDGE CO., Martin's Ferry, Ohio. Cost, $60,000.

The same architects have let, for Dodge Bros., 264 Jefferson Ave., contract for a 1-story forge building, 400 × 70 ft., the structural iron work to RUSSELL WHEEL & FOUNDRY CO., Joseph Campeau and M. C. R. R.

Baxter & O'Dell, 1024 Hammond Bldg., have let the general contract for a 3-story brick factory, 120 × 100 ft., for the Volkner & Harry Hardware Co., Larned St., to T. P. HAZEN CO., 1620 Reading Road, Cincinnati, Ohio. Cost, $32,000.

DETROIT, MICH.—R. E. Roseman, 1302 Penobscot Bldg., has let the following contracts for the Kelsey Wheel Co., for the proposed plant: Structural iron work to WHITEHEAD & KALES, Belcher Ave. and M. C. R. R.; masonry to J. E. BOOMER, 520 Forrest Ave.; carpentry to JOHN WHITTAKER & CO., 51 Church St.; buildings are to be one, two and three stories high and 50 × 60, 20 × 50, 161 × 42, 80 × 160 and 30 × 145 ft. John Kelsey is Secy., 227 Monroe Ave.

PONTIAC, MICH.—The Alden-Sampson Co., Morris Grabowsky, Mgr., Oakland Ave and Massachusetts St., has let the general contract for the proposed 1-story brick and concrete automobile factory, 150 × 800 ft. to HEITSCH BROS., South Saginaw St., Pontiac, Mich. Cost, $100,000.

KALAMAZOO, MICH.—H. B. Flagler has let the following contracts for the proposed 4-story and basement factory, 163 × 74 ft., for J. Gumbrusky & Co., Church and Eleanor Sts.: General contract to MOORE McQUIGG; masonry, to THOMAS FOY, all of Kalamazoo. Cost, $50,000.

MONROE, MICH.—The Amendt Milling Co. is contemplating an elevator and warehouse, two stories, 124 × 140 ft., at an estimated cost of $10,000. Architect not selected.

RONDOUT, ILL.—The Kelly-Atkinson Construction Co., a bridge building firm, 188 Madison St., Chicago, has purchased 2½ acres of land at Rondout, Ill., and will locate its plant and a large warehouse there. Construction work is to begin at once.

SHEBOYGAN, WIS.—The J. J. Vollrath Mfg. Co. will erect a new plant here. LUECKE & HILPERTSHAUSER, Sheboygan, Wis., have the general contract; WISCONSIN BRIDGE & IRON CO., Milwaukee, steel; concrete work sublet to CHARLES SINNER, Sheboygan. The warehouse will be 220 × 378 ft., one story; enameling building, 150 × 252 ft., one story; pickling shop, 90 × 110 ft., one story; mill and mixing building, 80 × 115 ft., two stories. Two other buildings will be erected; all to be of reinforced concrete and brick, practically fireproof.

DOWNING, WIS.—The Starr Automobile Co. of this city will erect a concrete factory building: First section, 90 × 200 ft.; other sections to be erected later.

WICHITA, KAN.—The Wichita Railroad & Light Co. will start the construction of its proposed car house on North Waco Ave., Wichita, about Aug. 1. The building will be 110 × 300 ft., and will contain office, quarters for the men, repair shops, paint shop and trackage for 45 cars. Two fire walls will run through building, making three complete and separate houses.

ST. LOUIS, MO.—The Fayette R. Plumb Co., Inc., of Philadelphia, has awarded the contract for its proposed St. Louis plant, to cost approximately $1,000,000, near the western city limits, in Wellston, to JOHN G. BROWN, Witherspoon Bldg., Philadelphia. The factory will employ 400 skilled men and will manufacture tools. The plant will consist of 16 buildings, each devoted to a specialty. The plans call for its ultimate enlargement to twice this size. Work will begin at once. Of the 16 buildings contracted for, 13 will be devoted to manufacturing purposes. The other three will be an office building and chemical laboratory, a service building and a power-house and machine shop.

The Charter Oak Stoke & Range Co., Main St. and Cass Ave., intends to erect a plant. Four buildings will be erected under 270,000 sq. ft. of roof. The main building will be 576 ft. 3 ins. long and 313 ft. wide, one story high, and will contain molding floors, pattern storage room, mounting shops, boiler room, engine room, wash and locker room for employees, warehouses and shipping rooms, most of which will be finished in granitoid floors. The plant will be a block of seven buildings. An office building, 100 × 100 ft.; a pattern shop and maintenance department building, 100 × 100 ft., and a stable, with the main works, will complete the group, to cost over $500,000. The site will be in that portion of the North Side east of Broadway bounded on the south by Thatcher Ave., on the west by the east line of the St. Louis Water Works conduit, on the north and northwest by the right-of-way of the St. Louis Terminal Railway Co., and on the east by the continuation southwardly of the west line of Kenrick St. Plans were drawn by Kilpstein & Rathmann, Archs., Chemical Bldg., and the contractor is EDWARD WARD, Chemical Bldg.

SAN BENITO, TEX.—J. P. McKinnis is preparing to erect a broom factory here. He expects to have the factory in operation ready to handle this season's crop of broom corn.

WICHITA FALLS, TEX.—Negotiations for a packing plant here have been closed by H. A. Emerson, of Chicago, J. A. Kemp and Frank Kell, of this city, and others. A larger plant than was first anticipated will be constructed, and the company will have $1,000,000 capital. Its capacity is to be 1,000 head of cattle and 2,500 hogs. Work is to start Aug. 15, and the plant is to be completed in eight months.

SAN ANTONIO, TEX.—The Commercial Motor Car Co. has secured a site for its proposed factory here for the manufacture of auto trucks. Z. Z. Brandon, of Toledo, Ohio, is Pres. About $100,000 will be invested in the enterprise.

CORPUS CHRISTI, TEX.—The Sealy-Hutchins Co., of Galveston, Tex., will erect a cotton compress here.

OKLAHOMA, OKLA.—The Osage Development Co., comprising I. S. Ross, Frank V. La Bountie and O. W. Gibson, of Oklahoma City; H. J. Scherrich, of Louisville, Ky.; H. W. Bingham, of Bristow, Okla.; Rev. D. L. Lamb, Charles E. Gartner and A. J. Burt, of Thomas, Okla.; A. H. Cutrell, of Bloomington, Ind., and Bishop Wheeler, of Kansas City, has purchased the Osage City townsite at the double division of the Missouri, Kansas & Texas Ry. Co., 100 miles north and east of Oklahoma City, and will start at once the work of building a city. The company has a contract for the establishment of a furniture factory with a capacity of 50,000 desks annually, work upon which is to begin immediately.

A cotton mill will be built at Oklahoma City by Southern manufacturers. A company has been incorporated to undertake the proposition and Joseph E. Sirrine, of Greenville, S. C., is Arch.-Engr.-in-Charge. It is known as the Oklahoma Bag & Cotton Mills and the capital stock is $1,000,000. The plant will be planned for an equipment of 10,000 spindles, 300 looms, machinery to manufacture bags from the cloth, and a bleachery. The incorporators of the company are John T. Woodside, of Greenville, S. C.; W. L. Cassaway, of Greenville, S. C.; M. L. Berry, of Oklahoma City; F. D. Ross, of Lawton, Okla., and R. G. Gaines.

RIVERDALE, CAL.—The Riverdale Cooperative Creamery Co. will erect a dairy at Riverdale. H. M. Hancock is Pres., Riverdale, Cal.

CALEXICO, CAL.—F. J. Decker, of the Salt Lake Alfalfa Meal Milling Co., Salt Lake City, Utah, will establish a factory plant here. Estimated cost, $25,000.

BAKERSFIELD, CAL.—Col. Carl Young, of Goldfield, Nev., will erect a factory here for the manufacture of sashes, doors and furniture.

HIGHLANDS, CAL.—W. L. Russell, of Highlands, will erect a concrete ice manufacturing plant on Palm Ave. The building will have one story with concrete floor and roof, and is to be equipped with machinery, to have a daily capacity of 6,000 lbs. A cold storage plant will be installed.

WINKELMAN, ARIZ.—The Winkelman Ice & Cold Storage Co. will erect a $25,000 ice manufacturing plant here, with a cold storage annex. John Belser and E. L. Taylor are at the head of the company.

PRESCOTT, ARIZ.—The Verde Valley Fruit Growers' Association will erect a canning factory at Prescott and storage houses at Humboldt and Jerome. A. S. Haskell, of Upper Verde Valley, is at the head of the association.

RENO, NEV.—Dr. C. A. Hascall, owner of the Fallon (Nev.) Beet Sugar Factory, will erect a similar factory here.

WINDSOR, ONT.—The Paterson Automobile Co., of Flint, Mich., has decided to locate its Canadian branch here.

ORILLIA, ONT.—Harry P. Dill, U. S. Consul, at Orillia, announces the erection of a large automobile factory in Orillia, which will produce 1,500 cars a year, and which should afford trade opportunities for American exporters of machinery and supplies.

MOOSE JAW, SASK.—We are officially advised that Gordon, Ironsides & Fares, of Winnipeg, Man., have decided to construct a packing plant here and will proceed at once with the construction. Architects and engineers are at work laying out the plant.

COLONIA DUBLAN (Chihuahua), MEXICO.—The Booker-Womer Lumber Co. has had plans prepared for a lumber mill of about 100,000 ft. capacity which it will erect here.

SUGAR FACTORY.—An A[...]can consul in the Far East reports tha[...] new sugar company, with a capital o[...] 1,500,000, is being organized in his distr[...] The plant and other equipment for th[...]mpany has not yet been contracted for, [...] it will be well for American manufactu[...] of this line of goods to get in touch wit[...] president of the company, whose name [...]ven in the report. (For addresses, etc[...]er to file No. 5165, Bureau of Manufa[...], Dept. of Commerce and Labor, Washi[...], D. C.)

MISCELLANEOUS CO[NT]RACTS.

(*denotes that this work is [adv]ertised in Engineering News.)

U. S. RECLAMATION SER[VIC]E.—All news concerning canal and irrigati[on p]rojects, etc., will be found under Water [Sup]ply—Irrigation.

CEMENT.—Pittsburg, Pa.—S[...]em under Streets and Roads.

LUMBER.—New York, N. Y[...]ls will be received by the Department o[f Str]eet Cleaning until July 12, for furnish[ing] and delivering lumber.

DITCH.—Fort Wayne, Ind.—[...] will be received by David Spindler, Su[pt.] of Drains, until July 9 for constructing [a l]arge ditch in Monroe Township.

CULVERT.—Freeport, Ill.—B[ids] will be received until July 18 by the Bo[ard] of Local Improvements for constructing [...] ft. of a 9-ft. concrete culvert. J. A. R. D[a]niels, City Engr.

BULKHEAD.—Philadelphia, Pa.—Bids will be received by the Department [of] Wharves, Docks and Ferries until noon, July 18, for the construction of a bulkhead between Vine St. and Callowhill St.

LUMBER.—Jeffersonville, Ind.—Bids will be received by Capt. L. D. Cabell, Q. M., U. S. A., until July 14, under Schedule No. 532 for furnishing 3,000 ft. ash, 10,000 ft. oak and 15,000 ft. poplar.

WHARF.—Seattle, Wash.—Bids will be received until 11 a. m., July 13, by Capt. E. C. Long, Const. Q. M., Seattle, for construction of a proposed addition to the new wharf at Fort Worden, Wash.

CONCRETE LINING.—Hardwick, Ala.—C. W. LANE & CO., INC., 317 Candler Bldg., Atlanta, Ga., have contract for lining with concrete a 1,400-ft. tunnel on the Seaboard Air Line at Hardwick, Ala. Estimated cost, $60,000.

*TOWBOAT.—New Orleans, La.—Bids will be received until 11 a. m., July 28, by Maj. H. Burgess, Corps Engrs., U. S. A., for constructing and delivering the steel hull sternwheel towboat "Lafourche."

WAGON SCALES.—New York, N. Y.—Bids will be received by the Department of Education until 3 p. m., July 11, for furnishing and delivering three wagon scales to the Board of Education of the City of New York.

DAMS, DIKES.—Los Angeles, Cal.—The Santa Fe System has awarded contract to the HOUSER CONSTRUCTION CO., Central Bldg., Los Angeles, for constructing concrete dams and dikes in Cajon Pass. Cost, $35,000.

BRICKS, CEMENT.—Los Angeles, Cal.—Parkinson & Bergstrom, Security Bldg., have prepared plans for remodeling Central Park at an estimated cost of $50,000. Bids will be asked on 300,000 bricks and 200 bbls. of cement.

*TOW-BOAT.—New Orleans, La.—Bids were received by Maj. H. Burgess, Corps Engrs., U. S. A., on June 24, for a steel hull sternwheel tow-boat "Teche." Bid of E. J. Howard, Jeffersonville, Ind., at $16,850, was recommended for acceptance.

DITCH.—Jackson, Minn.—Bids will be received until July 20 by P. D. McKellar, County Audr., for constructing ditch No. 8, requiring about 204,425 yds. excavation and for 147,440 ft. of tile. Estimated cost, $16,354 and $37,373, respectively.

PIER.—Oakland, Cal.—Bids will be received until 10 a. m., July 20, by the Board of Public Works for the construction of the Livingston St. pier for the Board of Public Works of the City of Oakland, Alameda County, Cal., Walter B. Fawcett, Secy.

LOCK, DAM, ETC.—New Orleans, La.—Bids received by Lieut.-Col. Lansing H. Beach, U. S. A., Custom House, New Orleans, on June 15 for building lock and dam and lockkeepers' dwelling on Bayou Teche, La., were rejected. New bids will be asked.

WILLOWS.—New Orleans, La.—Bids were received on June 24, by Lieut. Col. Lansing H. Beach, Constr. Q. M., U. S. A., New Orleans for furnishing willows at South or Southwest Pass, Mississippi River. Richard M. Murphy, New Orleans, was lowest bidder.

CONCRETE LINING.—Ogden, Utah.—Bids will be received until July 8 by Davis & Weber Counties Canal Co., 516 First National Bank Bldg., Ogden, for lining 7½ miles of company's canal with concrete. Separate bids will be received for excavating.

TILE DRAIN.—Clarion, Iowa.—Bids will be received until 2 p. m., July 11, by E. M. Callender, County Audr., for the construction of drain No. 56 located in Vernon Township. All bids must be by sections; bids may also be filed for drain or improvement complete.

LEVEE.—Middletown, Ohio.—The IRWIN BROS. CO. has sublet the work for the construction of the Stout-Thornton levee from the Trenton bridge to Middletown along the Miami River, to L. C. RYONS, 222 Ray St., Dayton, Ohio. The IRWIN BROS. CO. was awarded the contract for $25,477.

DRAINAGE.—Waco, Neb.—The letting of the contract, for which bids were to be received by the Commissioners of Waco Drainage District until July 15, for constructing a drainage system to cost about $18,000, has been postponed indefinitely. Grant & Letton, Engrs., F. & M. Bldg., Lincoln, Neb.

STEAM ROLLER.—Cincinnati, Ohio.—Bids will be received until noon, July 13, by the Director of Public Safety, City Hall, for furnishing one 8-ton asphalt steam roller for use of the Street and Sewer Repair Department, to be delivered f. o. b. municipal asphalt plant switch, Cincinnati, Ohio.

PIER BONDS.—Long Beach, Cal.—Bids will be received by the City Clerk, Long Beach, until 7:30 p. m., July 29, to purchase Municipal Pier Repair and Construction Bonds, Series I in the amount of $75,000, and Municipal Pier Repair and Construction Bonds, Series II in the amount of $50,000.

COAL-HANDLING PLANT. — Columbus, Ohio.—Bids will be received until noon, July 18, by the Board of Trustees, Ohio State University, for the erection of a coal-handling and storage plant, including locomotive crane, at the power-house at the Ohio State University. Carl E. Steeb, Secy.

CONCRETE DAM.—Ogdensburg, N. Y.—The Committee representing the Water Power Owners Association of Ogdensburg has awarded the contract of erecting the new concrete dam across the Oswegatchie River and other incidental work to WALTER BRADLEY, of Fulton, N. Y. Estimated cost, $10,000.

TELEPHONE POLES.—New York, N. Y.—Bids will be received by the Board of Water Supply, 165 Broadway, New York, until 11 a. m., July 20, for Contract 83, for furnishing and erecting telephone poles and appurtenances at various localities along the line of Catskill Aqueduct, in Ulster, Orange and Westchester Counties, N. Y.

DEPOT, PIER, ETC.—Mobile, Ala.—The New Orleans, Mobile & Chicago R. R. Co. is now preparing plans for the proposed freight and pasenger depot, new pier construction, etc., at Mobile, Ala. It probably will be 60 or 90 days before this company will be in a position to ask for bids. W. F. Owen is Gen. Mgr., Mobile.

WHARF.—New Orleans, La.—Bids were received on June 14 by the Board Port Commissioners, for constructing the Wm. A. Kernaghan wharf, the lumber and piling for which will be furnished by said board. A. C. Bell, Engr., 606 Hibernia Bank Bldg. Contract was let to W. T. CAREY & BROS., for work only, at $53,117.

DRAINAGE.—Belleville, Ill.—The property owners in Richland Creek Bottoms of Belleville, Ill., are forming a drainage district. They propose to excavate and lay the creek straight for a distance of six miles. The improvement will cost about $50,000. The secretary of the organization is Ed. Leopold, Belleville, Ill.

HULL.—Wheeling, W. Va.—Bids were received on June 22 by Capt. F. W. Alstaetter, Corps Engrs., U. S. A., for building a quarter-boat, No. 28, and a hull for snag-boat, Captain Turtle, for the Kanawha River improvement. Lowest bidder was J. M. Hammitt, Marietta, Ohio, at $1,700 for quarter-boat and $3,400 for hull.

*DREDGING EQUIPMENT.—Philadelphia, Pa.—Bids were received as follows on June 17 by the Department of Wharves, Docks and Ferries for a combination dredge (scoop and clam shell): Theodore Smith & Sons Co., Jersey City, N. J., $64,160; Browning Mfg. Co., Cleveland, Ohio, $64,824, 90-ft. length, and $67,845, 95-ft. length.

*BREAKWATER.—Boston, Mass.—Bids will be receiver until 2 p. m., July 15, by the Board of Harbor and Land Commissioners, State House, for building a stone breakwater at the entrance of Cohasset Harbor and dredging an anchorage basin and channel in the harbor. The two contracts will be let separately. Frank W. Hodgdon is Ch. Engr.

DITCHES, ETC.—Jacksonville, Ill.—Bids will be received until 11 a. m., July 20, by the Commissioners of the Indian Creek Drainage District, at the office of C. W. Brown, Engr., Scott Block, Jacksonville, Ill., for the construction of approximately 170,000 cu. yds. of excavation in ditches; also about 10,000 cu. yds. of team work on levees.

*DRAINAGE.—Atkinson, Ill.—Bids will be received until 3 p. m., July 23, by the Commissioners of Drainage, Union District No. 1, Towns of Atkinson and Alba, Henry County, for the construction of two small levees and a highway grade and the cleaning out of portions of the open ditches of the district. H. E. Reeves, Engr., Atkinson.

PIER, CONCRETE WORK.—Tompkinsville, N. Y.—The American Dock & Trust Co. has placed an order with Henry P. Morrison, C. E., 21 Park Row, New York, for a two-deck freight pier at Tompkinsville, S. I., N. Y., to rest on concrete piles. Mr. Morrison will receive plans and estimates for the concrete work; length of piles, 45 ft. to 75 ft., floor capacity, 450 lbs.

TRANSPORT.—San Francisco, Cal.—Bids were received on June 18 for overhauling and rebuilding the U. S. transport "Thomas," as follows: Moore & Scott Iron Works, San Francisco, $428,889; Heffernan Iron Works, Seattle, $426,939; Union Iron Works, $452,391; United Engineering Works, $462,243; Risdon Iron Works, $516,120; Mare Island Navy Yard, $517,174.

DRAINAGE DITCHES.—Woodstock, Ill.—Bids will be received until 1 p. m., July 23, by the Kishwaukee Special Drainage District for drainage ditches in this district. Dredge and about 20,000 ft. of 10-in. to 15-in. drain tile will be required. There will be about 260,000 cu. yds. of excavation. Estimated cost, $34,875. Hugh M. Price is Design. Engr., 1207 Hartford Bldg., Chicago.

REPAIRING WALL.—Boston, Mass.—Bids were received by Yards and Docks, Navy Department, Washington, D. C., for repairs to north foundation wall, Navy Yard, Boston, Mass., (Specification No. 1719): The M. McManus Contracting Co., 414 Wood St., Philadelphia, Pa., was lowest bidder at $3,469. Jones & Meehan, 10 Tremont St., Boston, Mass., submitted a conditional bid of $2,972.

CRANE.—Mare Island, Cal.—Bids were received as follows on July 2 for furnishing one 15-ton, three-motor, electric traveling crane at the Navy Yard, Mare Island, Cal.: Manning, Maxwell & Moore, New York, item 1, $5,300; 2, $6,600. Northern Engineering Co., Detroit, Mich., 1, $5,600; 2, $6,550. Morgan Engineering Co., Alliance, Ohio, 1, $6,250; 2, $7,450. Niles-Bement-Pond Co., New York, 1, $5,785; 2, $6,700.

DRAINAGE.—Clinton, Ill.—Bids received on June 25 were rejected by the Drainage Commissioners of Creek Union District No. 1, towns of Creek and Friends Creek, Counties of De Witt and Macon, for constructing the main drainage channel in said district, to be about four miles in length and requiring the excavation of about 53,378 cu. yds. of dirt to be moved 8 ft. from lines of the ditch. New letting of contracts later.

TELEPHONE SYSTEM.—Egmondville, Ont.—Bids will be received by Thos. G. Shillinglaw, Pres. Tuckersmith Municipal Telephone System, Egmondville, Ont., until noon, July 9, for the erection of a telephone system in townships of Tuckersmith, Stanley, and elsewhere as specified. Plans, specifications and form of contract can be seen at the residence of Thos. G. Shillinglaw, Egmondville, Ont., and at the office of George J. Beattie, Engr., 109 Victoria St., Toronto, Ont.

GRAIN ELEVATOR.—San Francisco, Cal.—The Globe Grain & Milling Co., San Francisco, has made application to the Harbor Commissioners for permission to install on the seawall a grain elevator and to connect the same by means of an underground tunnel with its mill. The Board will probably not only grant the required permission, it is stated, but will encourage others to install similar devices for reducing the cost of handling freight along the waterfront.

(Continued on page 10.)

CONTRACT PRICES.

(denotes that this work is advertised in Engineering News.)*

*PAVING—Boise, Idaho—Bids were received May 28, by the Board of Public Works of Boise, for paving with either asphalt, bitulithic, vitrified brick, concrete or granitoid (with oil macadam along street car tracks) in the streets and parts of streets in Paving District No. 15 (approximating 160,000 sq. yds.) with necessary excavation and gutters. The bidders on asphalt paving were (A) Coast Contracting Co., Tacoma, Wash.; (B) P. J. McHugh, Seattle, Wash.; (C) Pacific Paving Co., Seattle, Wash.; (D) Barber Asphalt Paving Co., Boise, Idaho. The bidders on concrete paving were: (E) J. Gustaffson, Boise, Idaho; (F) Coast Contracting Co., Tacoma, Wash.; (G) P. J. McHugh, Seattle, Wash.:

ASPHALT PAVING, BOISE CITY, IDAHO.

	A	B	C	D
37,978 cu. yds. excavation	$0.60	$0.60	$0.40	$0.50
147,911 sq. yds. pavement without guarantee	1.74	1.84	1.68	1.66
With five-year guarantee	1.89	1.84	1.78	1.76
294,100 lbs. gutter plates in place	.08½	.05	.06	.06
14,595 sq. yds. completed oil macadam along street car tracks	1.34	1.25	1.40	1.40
Total bid without guarantee	$324,707	$327,891	$301,760	$302,600
Total bid with five-year guarantee	$346,894	$327,891	$316,551	$317,391

CONCRETE PAVING, BOISE CITY, IDAHO.

	E	F	G
35,633 cu. yds. excavation	$0.70	$0.60	$0.60
147,911 sq. yds. completed concrete pavement	1.15	1.09	1.35
294,100 lbs. gutter plates in place	.05¼	.08½	.05
14,595 sq. yds. completed oil macadam pavement along street car tracks	1.00	1.34	1.25
Total	$225,076	$227,158	$254,008

Warren Construction Co., Portland, Ore., was the only bidder on bitulithic paving. The items were as follows: 35,633 cu. yds. excavation, 60 cts.; for 147,911 sq. yds. paving, completed bitulithic with stone base without guarantee, $1.98; completed bitulithic pavement with stone base and five-year guarantee, $2.05; completed bitulithic pavement with stone base and ten-year guarantee, $2.15; completed bitulithic pavement with concrete base without guarantee, $2.08; completed bitulithic pavement with concrete base and five-year guarantee, $2.15; completed bitulithic pavement with concrete base and ten-year guarantee, $2.25. For 294,100 lbs. gutter plates in place, 4½ cts. For 14,595 sq. yds. completed oil macadam along street car tracks, $1.57. Totals: Stone base without guarantee, $350,392; stone base with five-year guarantee, $360,746; total bid, stone base and ten-year guarantee, $375,537; total bid, concrete base without guarantee, $365,183; total bid, concrete base with five-year guarantee, $375,537; total bid concrete base with ten-year guarantee, $390,328.

R. S. Blome Co., Chicago, Ill., was the only bidder on granitoid. The items were as follows: 35,633 cu. yds. excavation, 65 cts.; 147,911 sq. yds. paving: completed granitoid pavement without guarantee, $2.25; completed granitoid pavement with five-year guarantee, $2.30; completed granitoid pavement with ten-year guarantee, $2.40; 294,100 lbs. gutter plates in place, 6 cts. Totals without oil macadam: Without guarantee, $373,607; with five-year guarantee, $381,002; with ten-year guarantee, $395,793.

FILTER.—Clarksburg, W. Va.—Bids were received by the Water-Works and Sewerage Board, Scott G. Highland, Secy., June 15 for a mechanical filter with appurtenances; also for furnishing and laying c.-i. water pipe, valves and appurtenances. Hering & Fuller, 170 Broadway, New York, are Engrs. This work was divided into two contracts, the bidders on contract No. 1 being: (A) H. C. Brooks Co., Clarksburg, W. Va.; (B) The Pitt Construction Co., 821 Fulton Bldg., Pittsburg, Pa.; (C) The N. Y. Cont. Jewell Filter Co., 15 Broad St., New York City; (D) Fred. T. Ley & Co., 29 Broadway, New York City; (E) Filbert Paving & Construction Co., 903 Penn Bldg., Philadelphia, Pa.; (F) The Sand & Gravel Co., East Liverpool, Ohio; (G) James Skene & Sons Co., Huntington, W. Va.; Bowman Bros. Co., McKeesport, Pa.; (I) Stamper Ragland & Co., Richmond, Va.; (J) The Kaps-Brehm Co., Cincinnati, Ohio.

The bidders on contract No. 2 were: (K) John I. Dick, Scottdale, Pa.; (L) W. M. Chisholm & Son, 331 4th Ave., Pittsburg, Pa.; (M) Wm. Bateson & Co., Wheeling, W. Va.; (N) Cantrel Construction Co., Parkersburg, W. Va.; (O) Sand & Gravel Co., East Liverpool, Ohio; (P) H. C. Brooks Co., Clarksburg, W. Va.; (Q) Thoney Pietro, Morgantown, W. Va.; (R) Filbert Paving & Construction Co., 903 Penn. Bldg., Philadelphia, Pa.; (S) Bowman Brothers Co., McKeesport, Pa.; (T) M. O'Herron & Co., First and McKean Sts., Pittsburg, Pa.; Joseph Fuccy, Weston, W. Va.; (V) The F. C. Welch Co., Clarksburg, W. Va.; (W) F. P. Cummings, Du Bois, Pa.

The itemized bids were as follows:

FILTERS, CLARKSBURG, W. VA.—CONTRACT NO. 1.

	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.
1. Temporary office building (lump sum)	$200.00	$500.00	$250.00	$250.00	$100.00	$250.00	$250.00	$250.00	$450.00	$275.00
2. 8,500 cu. yds. earth excavation	$0.40	.60	.60	.60	.62	.75	.65	.60	.60	.90
3. 4,000 cu. yds. rock excavation	.90	1.50	2.00	1.65	1.20	2.00	.80	1.50	2.00	1.50
4. Settling & coagulating basins (lump sum)	10,900.00	9,000.00	9,700.00	12,600.00	12,775.00	10,074.00	10,456.38	10,510.00	12,300.00	12,890.00
5. Clear water basin & filters (lump sum)	39,040.00	36,000.00	36,200.00	30,100.00	28,963.00	36,000.00	45,691.00	43,700.00	46,800.00	47,226.00
6. Outside piping connections (lump sum)	9,150.00	11,000.00	10,125.00	10,000.00	12,480.00	9,000.00	8,100.00	12,690.00	11,300.00	11,949.00
7. Boiler house addition (lump sum)	6,750.00	6,000.00	6,000.00	7,000.00	4,839.00	5,814.00	5,167.00	5,954.00	6,100.00	6,058.00
8. 200 cu. yds. additional concrete	8.50	10.00	9.00	12.50	6.25	7.00	8.50	10.00	10.80	14.00
9. 4,000 lbs. additional steel reinforcing	.04½	.04	.03¼	.05	.03	.05	.04½	.05	120.00	.03
10. Low lift pumps (lump sum)	2,060.00	2,500.00	2,600.00	3,500.00	2,900.00	2,900.00	....	2,600.00	2,500.00	3,679.00
11. High lift pump (lump sum)	3,870.00	4,500.00	4,800.00	5,300.00	4,600.00	6,400.00	....	4,051.00	4,000.00	5,921.00
12. Boilers (lump sum)	8,650.00	11,000.00	9,200.00	8,700.00	10,450.00	8,648.00	....	8,840.00	10,800.00	8,648.00
13. Distributing reservoir (lump sum)	13,000.00	11,000.00	10,900.00	13,500.00	17,290.00	13,411.00	12,030.25	10,500.00	9,500.00	16,700.00
Total Items 10 and 11	$5,930.00	$7,000.00	$7,400.00	$8,800.00	$7,500.00	$9,300.00	....	$6,651.00	$6,500.00	$9,600.00
Item 12	$8,650.00	$11,000.00	$9,200.00	$8,700.00	$10,450.00	$8,648.00	....	$8,840.00	$10,800.00	$8,648.00
Total Items 10, 11 and 12	$14,580.00	$18,000.00	$16,600.00	$17,500.00	$17,950.00	$17,948.00	....	$15,491.00	$17,300.00	$18,248.00
Total Items 1 to 9 and 13	$87,920.00	$86,760.00	$88,295.00	$87,850.00	$87,887.00	$90,524.00	$92,299.63	$96,904.00	$101,830.00	$111,668.00
Total Items 1 to 13	$102,500.00	$104,760.00	$104,895.00	$105,350.00	$105,837.00	$108,472.00	....	$112,395.00	$119,130.00	$129,916.00

FILTERS, CLARKSBURG, W. VA.—CONTRACT NO. 2.

	K.	L.	M.	N.	O.	P.	Q.	R.	S.	T.	U.	V.	W.
1,450 tons furnishing c.-i. pipe	$24.20	$24.90	$25.00	$25.75	$25.13	$26.30	$26.75	$26.21	$26.00	$27.45	$25.70	$30.00	$27.92
35 tons furnishing specials	50.00	50.70	25.00	85.00	52.25	54.00	60.00	51.25	60.00	55.00	55.00	60.00	67.10
2 furnishing 16-in. gates	62.00	55.00	56.00	67.00	60.00	65.00	62.00	55.65	30.00	72.50	58.90	60.30	69.72
11 furnishing 12-in. gates	30.00	30.00	31.75	33.70	31.00	38.00	41.00	33.60	36.00	37.50	32.00	32.65	36.12
2 furnishing 10-in. gates	23.75	23.00	23.75	25.90	22.00	30.00	34.00	26.25	30.00	28.75	26.00	25.95	27.72
12 furnishing 8-in. gates	17.75	16.00	17.00	18.55	16.25	22.00	27.50	19.43	20.00	20.00	19.00	18.15	19.32
9 furnishing 6-in. gates	11.25	11.00	11.50	12.30	9.75	15.00	20.00	12.88	15.00	13.00	13.00	12.35	12.60
14 furnishing 4-in. gates	7.25	6.60	7.00	8.25	7.10	9.00	18.00	8.66	8.50	8.00	8.00	7.50	7.80
35 furnishing hydrants	25.30	27.00	23.50	25.70	24.70	30.00	25.00	24.15	32.00	34.00	32.25	32.00	32.52
50 furnishing valve boxes	3.25	2.60	2.75	3.25	3.25	4.00	5.00	3.15	4.00	3.80	3.00	3.20	3.48
10,000 lin. ft. laying 16-in. pipe	.61	.57	.59	.68	.55	.73	.49	.53	.75	.85	.86	.75	1.43
9,000 lin. ft. laying 12-in. pipe	.44	.45	.45	.44	.48	.49	.44	.44	.65	.64	.83	.58	1.36
1,000 lin. ft. laying 10-in. pipe	.37	.39	.40	.37	.41	.40	.40	.34	.55	.52	.70	.52	1.32
10,000 lin. ft. laying 8-in. pipe	.33½	.34	.36	.28	.38	.33	.38	.31	.50	.43	.69	.44	1.24
6,000 lin. ft. laying 6-in. pipe	.28	.30	.32	.21	.31½	.29	.35	.29	.45	.43	.65	.35	1.10
500 lin. ft. laying 4-in. pipe	.23	.26	.28	.17	.27	.24	.33	.26	.35	.39	.50	.33	1.07
35 setting hydrants	1.25	2.00	2.00	2.00	5.00	7.00	15.00	3.25	5.00	5.00	5.50	5.50	5.50
1,000 lin. ft. 2-in. hydrant drains	.22	.36	.40	.20	.25	.19	.50	.50	.25	.50	.40	.35	.26
30 lin. ft. 1-in. hydrant drains	1.00	.25	.95	.12	2.50	3.20	5.00	.30	.20	.50	.35	5.75	2.20
Elk Creek crossing	325.00	75.00	225.00	200.00	150.00	50.00	150.00	1,652.00	750.00	1,500.00	200.00	300.00	1,656.00
Elk Creek crossing	325.00	75.00	225.00	200.00	150.00	50.00	100.00	1,652.00	500.00	500.00	175.00	300.00	1,439.00
Elk Creek crossing	410.00	150.00	800.00	600.00	150.00	50.00	100.00	1,652.00	500.00	1,000.00	250.00	850.00	1,228.00
300 cu. yds. extra earth excavation	.35	.50	.60	.35	.75	.90	.75	.48	1.00	.85	.75	.75	.46
250 cu. yds. rock excavation	.90	1.50	3.00	2.25	2.50	2.00	1.50	2.62	4.00	2.50	1.00	7.50	4.75
40 connections	7.50	5.00	10.00	5.00	20.00	20.00	15.00	20.00	10.00	15.00	3.00	10.00	20.00
4 valve chambers	35.00	40.00	45.00	30.00	36.63	25.00	35.00	36.00	25.00	25.00	40.00	32.00	44.50
200 cu. yds. concrete	7.50	7.00	8.00	7.00	7.50	7.00	10.00	7.50	8.00	8.00	12.00	7.00	6.45
500 lbs. iron clamps	.08	.05	.05	.05	.05	.10	.07	.20	.20	.03	.20	.22	.08
100 cu. yds. broken stone	1.00	3.00	3.00	2.25	3.00	1.50	2.00	3.00	3.00	1.00	2.50	3.00	2.20
1,000 ft. B. M. sheathing	15.00	30.00	25.00	40.00	35.00	25.00	40.00	50.00	50.00	30.00	35.00	30.00	38.50
1,500 sq. yds. resurfacing paving	.45	.30	1.00	.40	1.00	.85	1.00	.90	.50	.30	.75	1.00	1.80
Total amount of bid	$58,834	$59,121	$61,717	$62,205	$62,343	$64,929	$65,382	$66,996	$70,686	$73,511	$75,160	$75,883	$104,019

MISCELLANEOUS CONTRACTS.

(Continued from page 9.)

DUMPING BOARDS.—New York, N. Y.—The advertisement was withdrawn by the Department of Street Cleaning (1) for furnishing all the labor and materials required for the construction of a covered dumping board and runway on the pier at the foot of West 97th St.; (2) for furnishing all the labor and materials required for the construction of a dumping board and runway on the pier at the foot of West 134th St. Bids were asked until June 30.

EARTHWORK.—New Orleans, La.—Bids were received by Maj. H. Burgess, Corps Engrs., U. S. A., New Orleans, on June 27, for constructing about 350,000 cu. yds. of earthwork in the Lower Tensas Levee District. Contracts have been recommended for acceptance as follows: Loyd, 110,000 cu. yds., S. R. Bobbitt, Natchez, Miss., at 17.7 cts.; Buck Ridge, 78,000 cu. yds., Donovan & Daley, Lake Providence, La., at 15.4 cts.; Elk Ridge, Robt. G. Clark, Natchez, at 19.5 cts.

LEVEE.—Memphis, Tenn.—Bids were received on June 18 by Maj. M. L. Walker, Corps Engrs., U. S. A., Mississippi River Comm., First and Second Districts, Memphis, for levee work in (A) Reelfoot and (B) White River Districts. Contracts were awarded as follows: (A) 60,000 cu. yds. of enlargement, to W. L. MOSBY, Memphis, Tenn., at 23.7 cts. per cu. yd., and two acres grubbing at $150 per acre; (B) 100,000 cu. yds. enlargement, to ROACH & STANSELL, Memphis, at 15.8 cts.

DITCH, ETC.—Chillicothe, Mo.—Bids were received on June 28 at the office of A. W. Shelton, Clk., County Court, for constructing a main ditch and two laterals, including five steel bridges, three 30-ft. and two 20-ft. spans, six farm crossings and a dam in Drainage Dist. No. 15. Main ditch is to be 15,420 lin. ft., laterals 7,270 lin. ft., with 7,369 cu. yds. in main ditch. Thos. Hurst is Engr. and County Surveyor. Contract was awarded to LEWIS & DAVIS, Champaign, Ill., at $11,494.

MUNICIPAL IMPROVEMENTS.—An American consul in the Far East reports that recently a city in that region floated a loan of 8,000,000 yen to be used in certain municipal improvements. These include a city water supply and purifying plant to supply 1,000,000 inhabitants; public park and grounds for an exhibition; street improvements; a tide-water canal for drainage purposes and commercial use; payment of a large commercial and historical museum; and land for a public cemetery. In applying for addresses or details refer to file No. 5078, Bureau of Manufactures, Dept. of Commerce and Labor, Washington, D. C.

DRILLING MACHINERY AND TOOLS.—An American consul in a European country reports that extensive deposits of petroleum have been discovered in his district and companies have been formed to exploit the same. Another company is being organized in England with a capital of about $1,000,000 for this purpose, and catalogs of American drilling machinery, tools, etc., should be sent to the secretary or to the engineer in charge of the drilling. A Belgian company also has claims and is installing powerful machinery to enable it to drill to a depth of 1,000 or 1,200 feet. For more information and addresses apply to the Bureau of Manufactures, Dept. of Commerce and Labor, Washington, D. C., referring to file No. 5089.

*RIPRAP.—Wilmington, N. C.—Bids were received as follows on June 14 by Capt. Earl I. Brown, Corps Engrs., U. S. A., Wilmington, for 12,000 tons, more or less, of riprap stone. The first two bidders are F. O. B. cars, the remainder F. O. B. vessel: (a) 10,000 tons small; (b) 2,000 tons large: Balfour Pink Granite Co., Salisbury, N. C., (a) and (b) $1.40; the North Carolina Granite Corporation, Mt. Airy, N. C., (a) $1.40; (b) $1.35; Columbia Granite & Dredging Co., Washington, D. C., (a) and (b) $2.24; The Breakwater Co., Philadelphia, Pa., (a) and (b) $1.97; John Monk and S. E. Morris, Norfolk, Va., (b) $2.77½. Appropriation available is $175,000. The bid of the N. C. Granite Corporation has been recommended for acceptance.

*STEEL LOCK GATES, ETC.—Buffalo, N. Y.—Bids were received as follows on June 27 by Col. W. L. Fisk, Corps Engrs., U. S. A., for construction and erection of steel lock gates, valves and operating machinery for ship lock in Black Rock Harbor at Buffalo: (A) total, with cable gate operating machines and fixtures; (B) total with spar gate operating machines: Monarch Engineering Co., Buffalo, (A) $185,020, (B) $178,330; Penn Bridge Co., Beaver Falls, Pa., (A) $148,100, (B) $147,166; New Jersey Foundry & Machine Co., New York, (A) $183,098, (B) $179,913; Strobel Steel Construction Co., Chicago, (A) $186,232, (B) $181,930; MacArthur Bros. Co., New York, (A) $174,254, (B) $170,251; D'Olier Engineering Co., Philadelphia, (A) $146,984, (B) $152,804. Itemized bids will be given next week under Contract Prices.

SEAWALL, ETC.—New Orleans, La.—The city of New Orleans proposes to create a park on the shore of Lake Pontchartrain at the rear of this city. This work will consist of a reinforced concrete seawall and the filling-in of the lake bed between the seawall and the shore. The sea-wall will be placed about 500 ft. from the shore line at a point where the water is about 30 ins. deep and the daily tidal-oscillation about 6 ins.; the wall will be approximately 2,600 ft. long and 14 ft. high. The embankment will be about 2,200 ft. long by 500 ft. in width and from eight to ten feet in height and will embrace approximately 400,000 cu. yds of earth to be obtained by dredging in the lake bed outside of the seawall. Plans and specifications for this work are now being prepared by the city engineer's department and it is expected that bids will be requested about the end of July. Advertisement will run for about 30 days and will appear in Engineering News. W. J. Hardee is City Engr.

LIGHT HOUSE VESSELS.—Washington, D. C.—Bids were received as follows on June 28, by the Light House Board, Washington, D. C., for the following vessels: Light house tender "Aster," (a) coal burning; (b) oil burning: Fore River Ship Building Co., Quincy, Mass., (a) $172,750. John H. Dialogue & Sons, Camden, N. J., (a) $178,600. Pusey & Jones, Wilmington, Del., (a) $206,000. Newport News Ship Building & Dry Dock Co., Newport, News, Va., (a) $196,000; (b) $198,000. New York Ship Building Co., Camden, N. J., (a) $187,500; (b) $197,000. Bath Iron Works, Bath, Me., (a) $177,760; (b) $181,280. Vessel to be delivered at plant of bidders.

Light House Vessel No. 82, one third-class single-screw steel steam vessel: John H. Dialogue & Sons, Camden, N. J., $48,400. Racine Boat Manufacturing Co., Muskegon, Mich., $46,000.

Twin-screw gasoline-propelled wood lighthouse tender "Palmetto," (a) delivered at Charleston, S. C.; (b) at bidder's plant: Greenport Basin Construction Co., Greenport, N. Y., (a) $31,986, $29,384; (b) $31,168, $28,566. Murray & Tregurtha Co., South Boston, Mass., (a) $46,000. Wilson M. Wingood, Milford, Del., (a) $27,142; (b) $26,900. Waters Colver Co., West New Brighton, N. Y., (a) $29,345, $27,500; (b) $28,895, $27,050. Gas Engine & Power Co. and Charles L. Seabury Co., Consolidated, Morris Heights, N. Y., (a) $29,870; (b) $29,370. Racine Boat Mfg. Co., Muskegon, Mich., (a) $27,500, $25,300; (b) $26,000, $23,800. Truscott Mfg. Co., St. Joseph, Mich., (b) $24,600, $26,136.

U. S. POSSESSIONS.

*(*Denotes that this work is advertised in Engineering News.)*

STEEL LADDER DREDGE.—Panama.—Bids were received as follows on June 27, by the Isthmian Canal Commission, Washington, D. C., under Circular 575, for one steel ladder dredge to be delivered at Ancon, Isthmus of Panama: Lobnitz & Co., Renfrew, Scotland (Carr Bros., 32 Broadway, New York, American agents), $449,000; 365 days. William Simons & Co., Ltd., Renfrew, Scotland (John Reed, 41 Park Row, New York, American agent), $399,000; 365 days. Union Iron Works Co., San Francisco, $874,146; 14½ months.

*REINFORCING STEEL.—Po[illegible]rto Rico.—Bids will be received until 2 [illegible]m., July 25, by the Porto Rico Irrigatio[illegible] [illegible]rvice, Guayama, P. R., for furnishin[illegible] [illegible]ut 165,000 lbs. of steel bars for concret[illegible] [illegible]forcement; about 42,000 sq. ft. of meta[illegible] [illegible]c for concrete reinforcement; and 1,[illegible] of 12-in. pipe. B. M. Hall, Ch. En[illegible] Porto Rico Irrigation Service.

INDUSTRIAL N[illegible]S.

AN UNUSUALLY LARGE [illegible]ER for pay and tool checks has recentl[illegible] taken by the American Railway Supp[illegible]o., 24 Park Pl., New York, N. Y. Th[illegible]rder, which came from one manufacturin[illegible]ncern, was for 128,000 checks.

C. W. HUNT, 45 Broadw[illegible] New York, N. Y., builders of coal hand[illegible] conveying and hoisting machinery, an[illegible]e the following changes: A new o[illegible] has been opened at State Bank Bldg., [illegible]mond, Va., and 607 Rhodes Bldg., Atlan[illegible], the latter in charge of Mr. W. F. [illegible]or several years preliminary engineer t[illegible] company. Mr. C. T. Anderson has been [illegible]nted manager of the Chicago office, 16[illegible]sher Bldg.

(Continued on page[illegible])

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

Noted in issue of

7- 7 Lighting fixtures, Trenton, N. J. 7- 7
7-10 Standpipe, Seattle, Wash 7- 7
7-11 Elec. equip., New York........... 6-30
7-11*Heating plants, etc., Atlanta, Ga. 6-16
7-12 Engine, Calgary, Alta............ 6-30
7-12 Franchise, Bakersfield, Cal........ 6-30
7-12 Elec. wiring, Cortland, N. Y...... 7- 7
7-13*Hydroelectric plant, Bedford City, Va........................ 6-30
7-16 Generator sets, etc., Charleston, S. C.......................... 6-30
7-18 Volt-transformers, etc., New Hamburg, Ont...................... 7- 7
7-18 Elec. equipment, New York....... 7- 7
7-19 Gas producer, etc., Strawberry Point, Iowa 7- 7
7-19 Franchise, Berkeley, Cal.......... 7- 7
7-20 Lighting fixtures, Washington, D. C........................... 7- 7
7-21 Elec. light fixtures, New York.... 6-30
7-22 Gas engine, Pierre, S. Dak....... 6-30
7-25 Boiler, etc., Saskatoon, Sask..... 7- 7

Bridges.

7- 8 Bridges, Bluffton, Ind............ 6-30
7- 8 Bridges, Lebanon, Ind............ 6-30
7- 8 Bridge, Oceanside, Cal............ 7- 7
7- 8 Bridge, Shelton, Wash............ 7- 7
7- 8 Bridge, Red Lake Falls, Minn.... 7- 7
7- 8 Bridge, Cincinnati, Ohio......... 7- 7
7- 9 Bridge, Alamosa, Colo............ 7- 7
7- 9 Bridges, Fairfax, S. Dak......... 7- 7
7- 9 Bridge, Rochester, Pa............ 7- 7
7- 9*Bridge, Huron, Ohio 6- 9
7-11 Bridges, Fort Benton, Mont....... 6-30
7-11 Bridge or culvert, Little Rock, Ark.............................. 7- 7
7-11 Bridge, Two Harbors, Wis........ 7- 7
7-11 Bridges, Laurinburg, N. C........ 7- 7
7-12 Bridge, Napa, Cal................ 7- 7
7-12 Bridges, etc., Visalia, Cal........ 6-30
7-12*Bridge, Hummelstown, Pa........ 6-30
7-13 Bridge work, Cleveland, Ohio..... 6-23
7-14 Substructure, etc., Columbus, Ohio 6-23
7-16 Bridge, Jeffersonville, Ind........ 6-16
7-16 Concrete piers, Tiffin, Ohio....... 7- 7
7-17 Bridge, Pocatello, Idaho.......... 6-30
7-18*Bridge, Columbus, Ga............ 6-16
7-18 Culvert, Freeport, Ill............ 7- 7
7-18 Bridges, Defiance, Ohio.......... 7- 7
7-19 Bridge, Lorain, Ohio 7- 7
7-19 Substructure, etc., Hamilton, O... 7- 7
7-19 Bridge, Forest City, Iowa......... 7- 7
7-19*Bridge floor, Berwick, Pa........ 7- 7
7-20 Substructure, Edmonton, Alta.... 7- 7
7-20*Bridge, Greenville, S. C.......... 6-30
7-20 Bridges, Somerset, Pa............ 6-30
7-23 Superstructure, Solon, Me........ 6-30
7-23 Bridge, Wiggins, Colo............ 7- 7
7-25 Bridges, Manhattan, Kan.......... 7- 7
7-25 Bridges, Leesburg, Va............ 5-26
7-25 Bridges, Kansas City, Mo........ 7- 7
7-28 Bridge work, Alexandria, La. ... 6-16
8- 1*Viaduct, Barberton, Ohio........ 7- 7
8- 1 Viaduct, Dallas, Tex............ 7- 7
9- 1 Bridge superstructure, Quebec.... 6-30
9- 5 Bridge repair, Gaffney, S. C...... 7- 7

Buildings.

7- 8 Sanatorium, New York........... 6-30
7- 9 Building, Toronto, Ont........... 7- 7
7-11 Court-house, Greenville, N. C.... 6-30
7-11 Schools, New York............... 6-30
7-11 School, Ft. Wayne, Ind........... 6-30
7-11 Hospital, St. Paul, Minn.......... 6-30
7-11*Post-office, Columbus, Neb...... 6- 2
7-12 Quarters, San Francisco, Cal..... 6- 9
7-12 School, Indianapolis, Ind......... 6-30
7-12 School, Cortland, N. Y........... 7- 7
7-13 Barn, etc., Indianapolis, Ind...... 6-30
7-14 School, Crawfordsville, Ind....... 6-30
7-14 School, Portsmouth, Ohio......... 7- 7
7-18 School bonds, Duluth, Minn....... 7- 7
7-18 Schools, New York 7- 7
7-18*Post-office, Demopolis, Ala. 6- 9
7-18 School, Cleveland, Ohio.......... 6-30
7-18*Hospital, Ft. Monroe, Va......... 6-30
7-21 Court-house, Brookville, Ind 6-30
7-25 Storehouse, Rock Island, Ill...... 7- 7
7-26 Cabinet work, Peru, Ind.......... 6-30
7-26 Quarters, Louisville, Ky.......... 6-16
7-27*Post-office, Lewiston, Idaho 6-16
7-27*Dwellings, Cincinnati, Ohio..... 6-30
8- 1*Post-office, Santa Cruz, Cal..... 6-23
8- 3*Post-office, Litchfield, Ill........ 6-30
8- 4 Post-office, Chelsea, Mass........ 7- 7
8- 8 Post-office, Amsterdam, N. Y..... 7- 7
8- 9*Post-office, Woburn, Mass........ 7- 7
8-10*Post-office, Decorah, Ia.......... 7- 7
8-25 Buildings, etc., Hawaii.......... 6- 9
9-10 Plans, Albany, N. Y............. 6- 9
11- 1 Plans, Toronto, Ont............ 6- 9

Water-Works.

7- 8 Canal enlargement, Boise, Idaho. 5-19
7- 8*Standpipe, Waynesboro, Va. 6-16
7- 9 Dam, Denver, Colo.............. 7- 7
7- 9 Water supply, Dayton, Ohio...... 7- 7
7-11 Water-works, Indianola, Iowa.... 7- 7
7-11 Well, Corydon, Iowa 6-16
7-11 Pumping plant, Livonia, N. Y.... 6-30
7-11*Water system, Pike, N. Y....... 6-30
7-13 Water-works supplies, New York. 6-30
7-13 Water-works, Sultan, Wash...... 6-30
7-13 Pump house repairs, Brooklyn, N. Y............................. 6-30
7-13 Dam, etc., New Bremen, Ohio.... 7- 7
7-13 Watermains, New York.......... 7- 7
7-14 Water-works, Donnelly, Minn.... 7- 7
7-14*Steel tank, Pittsburg, Pa........ 6-30
7-15*Steam and water pipes, Atlantic City, N. J...................... 6-30
7-15*Pumping plant, Carrollton, Ill.... 6-23
7-15 Water-works, Oxford, Miss....... 7- 7
7-18*Dam, Boulder, Colo............. 6-23
7-19 Coagulating basins, Atlanta, Ga. 6-30
7-20*Dam, etc., Fort Meade, S. Dak.. 6-30
7-20*Test borings, New York......... 7- 7
7-21*Pumping machinery, Grand Rapids, Mich............................ 6-30
7-22*Pumping plant, Carrollton, Ill... 6-30
7-26 Boiler and pump-house, Fairport, Iowa 7- 7

Sewers.

7- 8*Disposal plant, etc., Norristown, Pa............................... 6-23
7- 8 Sewer, Louisville, Ky........... 6-30
7- 8 Sewer, Montreal, Que........... 7- 7
7- 8 Sewer, Marion, Ind............. 7- 7
7- 9 Drain, Boston, Mass............ 6-16
7-11*Sewage tank, Charleston, S. C... 6-16
7-11*Sewer system, Sandpoint, Idaho.. 6-23
7-11 Sewer, Winona, Minn............ 6-30
7-11 Sewage works, Elk City, Okla.... 7- 7
7-11 Disposal plant, Ellendale, N. Dak. 7- 7
7-11 Sewer laterals, Alliance, Neb.... 7- 7
7-11 Sewers, Fort Dodge, Iowa....... 7- 7
7-11 Sewers, Kaukauna, Wis......... 7- 7
7-12 Sewer, Crookston, Minn......... 7- 7
7-12 Sewers, Leon, Iowa............. 6-30
7-12 Sewers, New Brighton, N. Y..... 6-30
7-12 Tile pipe, Swift Current, Sask... 6-30
7-12 Sewer system, Herington, Kan... 6-30
7-12 Sewer fittings, etc., Atlanta, Ga.. 6-23
7-12 Sewers, Sabetha, Kan........... 6-16
7-13 Repair of sewer, Brooklyn, N. Y.. 6-30
7-13 Sewers, Steelton, Ont............ 7- 7
7-13 Sewer system, O'Neill, Neb...... 7- 7
7-13 Sewers, Binghamton, N. Y....... 7- 7
7-14 Sewer, New York............... 6-30
7-14 Sewers, New York.............. 7- 7
7-15*Sewer, Milan, Mich............. 7- 7
7-15 Sewer system, Albert Lea, Minn.. 7- 7
7-15 Sewer, Elizabeth, N. J.......... 6-30
7-15 Sewer system, Herington, Kan.. 7- 7
7-18 Disposal plant, Moose Jaw, Sask. 7- 7
7-18 Sewer, Minerva, Ohio........... 6-30
7-18*Sewers, Westfield, N. J......... 6-30
7-19 Sewer, St. Bernard, Ohio........ 7- 7
7-19*Sewers, Haddon Heights, N. J.. 7- 7
7-19*Drainage, Amarillo, Tex......... 7- 7
7-20 Drains, Baltimore, Md........... 7- 7
7-20*Sewer, etc., Phila., Pa.......... 6-30
7-22 Sewer, Malden, Mass............ 7- 7
7-23*Sewer, Lafollette, Tenn......... 7- 7
7-25 Drain, Savannah, Ga 6-23
7-26*Sewer, Toronto, Ont............ 6-30
7-27*Sanitary sewers, Union City, Tenn 6-30

Streets and Roads.

7- 7 Paving, Ingram, Pa............. 7- 7
7- 8 Road, Indiana 6-23
7- 8 Roads, Concord, N. H........... 6-23
7- 8 Sidewalks, etc., Hoosick Falls, N. Y............................. 6-23
7- 8 Macadam, Flemington, N. J...... 6-23
7- 8 Road, Frankfort, Ind............ 6-30
7- 8 Road, Columbus, Ind............ 6-30
7- 8 Pike, Findlay, Ohio............. 6-30
7- 8 Road, Wooster, Ohio............ 6-30
7- 9*Paving, Washington, D. C....... 6-23
7- 9 Paving, Charleston, S. C........ 6-16
7- 9 Macadam, Sacramento, Cal....... 7- 7
7-11 Roads, Ft. Ward, Wash.......... 7- 7
7-11 Paving, Paris, Tex.............. 7- 7
7-11*Paving, Waukesha, Wis.......... 6-16
7-11 Road, Indiana 6-23
7-11*Paving, Newark, N. J........... 6-23
7-11*Paving, etc., Vinton, Ia......... 6-30
7-11 Road, Newport, Ind............ 6-30
7-11 Road, Hartford, Conn........... 6-30
7-12 Roads, Fairmont, Minn.......... 6-30
7-12 Paving, Lake City, Fla.......... 6-23
7-12 Roads, etc., Ft. Slocum, N. Y.... 6-23
7-12*Paving, Beach City, Ohio........ 6-30
7-12 Roads, etc., Ft. Worden, Wash.. 6-30
7-12 Paving, Avalon, Pa............. 7- 7
7-13 Paving, Millersburg, Ohio........ 7- 7
7-13 Macadam, Madisonville, Ohio..... 6-30
7-13*Roads, Freehold, N. J........... 6-30
7-14 Macadam, Laporte, Ind.......... 6-30
7-14 Paving, Sandusky, Ohio......... 6-30
7-14 Road, Towson, Md.............. 6-30
7-14 Road, Baltimore, Md............ 6-23
7-14 Paving, etc., Osceola, Ia........ 7- 7
7-14 Paving, Lisbon, Ohio........... 7- 7
7-14 Paving, New York.............. 7- 7
7-15 Road impvt., Fernbank, Ohio..... 7- 7
7-15 Macadam, Toledo, Ohio......... 7- 7
7-15 Macadam, Dayton, Ohio......... 7- 7
7-15 Paving, Watertown, N. Y........ 7- 7
7-15 Road, Cincinnati, Ohio......... 6-30
7-16 Paving, Oberlin, Ohio........... 7- 7
7-18*Paving, Marshalltown, Iowa...... 7- 7
7-18 Paving, etc., Lockland, Ohio..... 7- 7
7-18 Asphalt, Columbus, Ohio........ 7- 7
7-18 Paving, Atlanta, Ga............. 7- 7
7-19 Sidewalks, Concrete, Wash........ 7- 7
7-20 Grading, Berlin, Center, Ohio..... 7- 7
7-20 Paving, Struthers, Ohio......... 6-30
7-20 Paving, etc., New York......... 7- 7
7-22*Paving, Caldwell, Ohio.......... 7- 7
7-23 Paving, Boston, Mass........... 7- 7
7-25*Paving, Amarillo, Tex........... 7- 7
8-10*Macadam, Denison, Tex.......... 7- 7

Miscellaneous.

7- 8 Surveying, etc., Belle Vernon, Pa. 6-30
7- 8 Steel bars, Atlanta, Ga......... 6-23
7- 8 Concrete lining, Ogden, Utah.... 7- 7
7- 9 Ditch, Fort Wayne, Ind......... 7- 7
7- 9 Telephone system, Egmondville, Ont 7- 7
7- 9 Drain, Boston, Mass............ 6-23
7- 9 Ditch, Anderson, Ind 6-30
7- 9 Ditch, Hallock, Minn 6-30
7-11 Wagon scales, New York, N. Y.. 7- 7
7-11 Tile drain, Clarion, Iowa........ 7- 7
7-12 Insulation, New York, N. Y..... 6-30
7-12 Naval supplies, Washington, D. C. 6-30
7-12 Light-house supplies, Tompkinsville, N. Y......................... 6-23
7-13 Wharf, Seattle, Wash 7- 7
7-13 Steam roller, Cincinnati Ohio.... 7- 7
7-14 Lumber, Jeffersonville, Ind...... 7- 7
7-14*Metal shelving, San Francisco... 6- 9
7-15 Metal shelving, Atlanta, Ga..... 6-16
7-15 Drainage, Waco, Neb........... 6-16
7-15*Ditches, Helena, Ark 6-30
7-15 Railway grading, Berlin, Ont. (Elec. Rys.) 6-30
7-15*Breakwater, dredging, Boston, Mass. 7- 7
7-18 Bulkhead, Philadelphia, Pa...... 7- 7
7-18 Coal-handling plant, Columbus, Ohio 7- 7
7-18 Culvert, Freeport, Ill 7- 7
7-18 Air lift system, stone, Moose Jaw, Sask 6-30
7-19*Barge canal, Albany, N. Y..... 6-23
7-19 Dredging, Trenton, N. J....... 6-23
7-20 Dredge, Vancouver, B. C....... 6-16
7-20 Ditch, Jackson, Minn 7- 7
7-20 Pier, Oakland, Cal 7- 7
7-20 Telephone poles, New York, N. Y. 7- 7
7-20 Ditches, etc., Jacksonville, Ill.... 7- 7
7-22*Removing rock, gravel, etc., New York, N. Y....................... 6-23
7-23 Drainage ditches, Woodstock, Ill. 7- 7
7-23*Drainage, Atkinson, Ill......... 7- 7
7-25 Trinitrotoluol, Ft. Totten, N. Y.. 6- 9
7-25*Dams and canal, Porto Rico..... 5-12
7-25*Reinforcing steel, Porto Rico.... 7- 7
7-28*Towboat, New Orleans, La....... 7- 7
8- 8*Ry. grading and bridges, El Paso, Tex. 6-30

Examinations.

7- 8 Electrician, New York, N. Y.... 6- 2
7-13 Junior Engineer, Wash., D. C.. 6- 2
7-13 Asst. Engr., Wash., D. C........ 6- 2
7-13 Examiner, Klamath Falls, Ore.... 5-12
7-27 Asst. Chemist, Wash., D. C...... 6-23
7-27 Laboratory Aid, Wash., D. C.... 6-23

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 22[illegible] Broadway, New York.

7- 8*Standpipe, Waynesbo[illegible], Va..(S.) 6-16
7- 8 Canal enlargement, Bo[illegible], Iowa, (P. & S.) 5-19
7- 9 Drain, Boston, Mas[illegible] ....(S.) 6-16
7- 9 Paving, Charleston, S[illegible] ....(S.) 6-16
7-12 Sewer fittings, etc., A[illegible]a, Ga. (S.) 6-23
7-12*Bridge, Hummelstow[illegible] (P & S) 6-30
7-15*Ditches, Helena, Ar[illegible] ......(S.) 6-30
7-16 Generator set, etc., C[illegible]leston, S. [illegible] (S.) 7- 7
7-19*Bridge floor, Berwi[illegible] [illegible]a....(S.) 7- 7
7-22*Pumping plant, Car[illegible]on, Ill. (S.) 6-30
7-23 Paving, Boston, Ma[illegible] ......(S.) 7- 7
7-25*Dams, canal, Porto [illegible] (P. & S.) 5-12
C ....(S) 6-30

CURRENT PRICES OF ENGINEERING MATERIALS

Supplement to ENGINEERING NEWS, appearing in the First Issue of Each Month. New York, July 7, 1910.

PRICE CHANGES AND THE BUSINESS OUTLOOK.

Contractors throughout the country are eager seeking new work, and, in many cases make extremely low bids, considering the price of labor and materials. The volume of construction work coming out is not as large as a month ago, nor a year ago. Reports of decided curtailment of railway construction must be taken with a liberal allowance for the keen disappointment of the speakers. There has been no important stoppage of work under force account as was the case three years ago. The leading railways of the country are buyers of material and are endeavoring to purchase it at the best advantage.

The freight rate question has agitated the entire business community for the month, and while conditions are somewhat clouded, there is now a stable meeting ground between the shippers and sellers of transportation. The recent adverse decisions by the Interstate Commerce Commission to the transcontinental roads have been a subject of much agitation for years past. At least as much apprehension was prevalent in the minds of railway executives when the Interstate Commerce Commission was first created as there is now on account of its greatly increased powers.

The actual volume of business transacted is as large, if not larger, than ever before, save in a few special lines, but the profits derived from operation are small.

Pig iron prices are apparently grounding on bottom, being much lower than those prevailing a year ago. The buying of pig iron during June was unusually large. The demand for structural steel was enormous, making a new high record. The most important contract taken was for the Panama Canal lock gates, involving approximately 60,000 tons of finished material. Buying of bridges by the railways was also large, numerous contracts for small bridges having been placed, as well as the steel work for many manufacturing plants.

In the tin plate trade a new high record for output was established. Plates, shapes and bars are $1 per ton cheaper than a month ago, but are still more than 10% higher than at this time last year, although the price of coke and steel making pig iron is the same as a year ago. A favorable sign is a better demand for scrap materials.

The cement industry is in the best shape than it has been since the panic, many of the smaller manufacturers having sold their output for the present year. Announcement has been made that the second largest manufacturer will increase its facilities about 20%.

Copper is less active than last month and prices are lower. The production of copper continues far in excess of consumption and European consumers are unwilling to relieve American producers of the surplus at present quotations.

Speculation, although less rampant than earlier in the year, has trended toward lower prices. The Western land boom has subsided, partially owing to lower prices for grain and particularly because large fiduciary organizations have refused to finance any speculative schemes except at high premiums. The grain crop will be as large as last year and indications point to a large cotton crop.

The labor market is more settled than for months past and strikes are of infrequent occurrence. Every man willing to work, at manual labor, can find employment. This is partially due to the enormous demand for agricultural laborers.

Few important contracts for general construction have been closed during the month, except for bridge work. A St. Lawrence River bridge has been let and the contract closed for a Mississippi River bridge. The Pennsylvania Railroad will expend about $25,000,000 for terminal improvements in Chicago. A $25,000,000 pressure tunnel has been authorized by the City of New York.

LABOR.

Pessimistic utterances of men in high places to the contrary notwithstanding, labor is well employed at good wages. In the East the situation is practically unchanged from a month ago. All men willing to do manual work can find steady employment. Italian laborers receive the highest wage at $1.75 for eight hours' work, while other foreign laborers command from $1.50 to $1.65. In the industrial lines, too, the demand is active. More machinists could be used at the prevailing scale, and in the foundry trades more workmen would be welcome. In these lines, however, the scarcity is not so apparent as for common laborers. Mechanics in the building trades are fairly well employed, the exceedingly unfavorable weather during the last month having curtailed operations to a marked degree. Apparently there will not be as much activity in the building trades during the Fall months.

The ranks of all kinds of laborers will be depleted during the next two months owing to the necessity of securing every available man to aid in harvesting the crops. On some of the Western railways, particularly the Southwest, construction gangs have left their work to find more lucrative employment in the harvest field.

The increased wage scale of the railways is having more effect on general industrial lines. The railways in the past have always paid lower wages than other lines of industry, claiming that the employment was steady and lasted a life time, and in consequence they were able to draw some of the ambitious men; others going to different lines of industry found compensation higher, but employment less steady. This condition of affairs has been changed materially and the railways of the country are now, in many lines of work, paying as high wages as other employers. This means that when the time comes for railways to really retrench that the curtailment will take the form of a cut in wages rather than a cut in the number of employees. Perhaps the day is far distant when such an occurrence will take place, but nevertheless in the light of the last retrenchment by the railways, it will be looked upon with much interest.

Among the wage increases announced are noted the general advance to railway employees in Canada; an increase on the Reading Railway of 6 to 20% and higher compensation has been granted to subordinate workers on the Atchison.

Steerage passengers arriving at the port of New York from January 1 to June 25, inclusive, numbered 588,512, compared with 518,730 in the corresponding period last year.

CEMENT, LIME AND BRICK.

PORTLAND CEMENT.—New high records as far as shipments of cement are concerned were made by at least four companies last month. The trade is in excellent shape as far as the amount of cement being produced is concerned and the good business will be continued for at least two months longer. The situation is well in hand and there is no likelihood of there being any shortage, this season, at least. One of the large companies shipped 1,150,000 bbls. during the month of May.

Conditions outside of the restricted territory, east of Harrisburg, are steadily improving and prices there are higher than in the East, the makers securing fairly satisfactory profits. Some talk is heard that prices of cement may be raised in the near future. The idea prevails, however, that some of the companies which have made so much trouble in the past regarding low prices are to be given a season of low figures. The question of higher prices has been discussed, but no action taken on it. The cement mills in the meantime are making very little money.

The Universal will erect another 2,000,000 bbl. plant.

Prices continue without change and for cement delivered within the lighterage limits of New York City, $1.43 per bbl. is quoted. In Philadelphia, $1.42; in Boston, $1.32; in Buffalo, $1.50.

Imported cement continues without change, Alsen's being quoted at $2.42, and Dyckerhoff's $2.43.

NATURAL CEMENT.—Business is not at all satisfactory, nor up to expectations. Prices are unchanged at 80 cts. per bbl. delivered alongside of dock New York City.

LIME.—The demand is only fair. Some of the largest producers have had a good business, but nothing exceptional. Prices continue unchanged from last month. For large lots delivered New York City quotations are as follows: State common, per bbl., 75 cts.; Rockland-Rockport common, 92 cts.; Rockland-Rockport special, 320 lbs., $1.37; select finish, 350 lbs., net, $1.60; New Milford, $1.30. Hydrated lime for brick work is $6.50 per ton; for finishing, $9 per ton. These prices are for carload lots.

Adamant wall plaster is $6 per net ton delivered at the work.

BRICK.—In spite of labor troubles in the yards of some brick makers the supply exceeds the demand. The continued wet weather has retarded the manufacture of brick, but for the same reason buildings have not gone up as rapidly as expected. The price has worked lower and Hudson River common are bringing $5.75 per thousand compared with $6 last month. Light hard brick are quoted at about $4.25 to $4.50. Raritan River common brick are steady at $5.75 to $6, about the same as last month.

Boston prices are unchanged at $7.00, and Chicago the same figure is quoted.

White enameled brick are in excellent demand, the unchanged price is $60 per M. for the American size (8¾ × 2¼-in enameled surface by 4⅛-in. bed), and $70 to $75 for the English size (9 × 3-in. enameled surface by 4½-in. bed). Prices are f. o. b. Perth Amboy.

PLASTER BLOCKS.—For large lots prices are as follows:

	Weight lbs. per sq. ft.	Price cts. per sq. ft.
2-in.	7	6
3-in.	8½	6¼
4-in.	11	7¼

These blocks are made 32-in. long by 13½-in. wide containing 3 sq. ft. of surface. The 2-in. blocks are solid, but the others are hollow.

Plaster boards ⅝-in. thick are 16 cts. per sq. yd.

STONE.

BLUE STONE.—Considerable improvement is noted in the volume of business being taken by handlers of blue stone. In New York the demand is good and prices are fair, considering the competition. It is believed that more blue stone will be delivered this year than in either of the last two years.

Prices continue without change from last month and for delivery either along side of dock or f. o. b. cars, New York City, are as follows: Flagging, 6 cts. per sq. ft. per in. of thickness; flagging, 2½ to 3-in. thick that will pass New York City specifications, 18 to 19 cts. per sq. ft. Some concessions, however, have been made and stone of this character has sold at 17 cts.

Sewer bottoms 5 ft. sq. and 3-in. thick are sold at 25 cts. per sq. ft. Curbing, 5 × 16-in., is 35 cts. and 5 × 24-in. by 5-in. thick is 60 cts., and 6-in. thick is 72 cts. per lin. ft.

Promiscuous shapes of building and foundation stone sell at 70 to 74 cts. per cu. ft.

GRANITE.—The demand for granite is fair. It is, in fact, better than last month, although no especially large jobs have come out in this vicinity. The precarious nature of the granite industry is illustrated by the failure of a very old New England house last month. Prices are without change at 40 to 45 cts. per cu. ft. for promiscuous shapes or run of quarry.

Pink Milford granite is $1.00 per cu. ft. for promiscuous shapes.

LIMESTONE.—The inquiry for limestone is relatively better than for granite. Some large work has recently been taken. The price continues unchanged, and for large lots of limestone delivered along side of dock, New York City, 85 cts. per cu. ft. is named. Dressed stone is from $1.25 to $1.50 per cu. ft.

Sandstone in the rough is 80 cts. to a $1 per cu. ft.

INTERIOR STONE.—More business has developed in the line of interior and decorative stone than for some time. Prices are rather indeterminate, but in general slate flooring 1-in. thick can be had at 20 cts. per sq. ft. for the common or ribbon variety. Clear black sells at 35 to 40 cts., and the same price is asked for Vermont. Combination of slate and marble flooring is 30 cts. per sq. ft.

Marble flooring finished ready to lay of Vermont marble is 50 to 70 cts. per sq. ft.; Italian marble, 70 to 90 cts. Tennessee marble can be had at 65 cts. Ordinary stair work, such as slate steps, are quoted at 24 cts. per sq. ft.

CRUSHED STONE, SAND AND GRAVEL.

CRUSHED STONE.—Considerable improvement is noted in the volume of the crushed-stone business being taken, but owing to the long-continued wet weather some sales were made at low figures. At least one large order was taken at 80 cts. for 1½-in. stone. This was because the seller of stone wanted his boats released, as stone was piling at the quarry. The rental of boats advanced sharply the latter part of June, but has since declined.

In the main prices are firm at 85 to 95 cts. for 1½-in. stone, 95 cts. to $1.00 for ¾-in., and 85 to 90 cts. for screenings. These prices are per cu. yd. for full cargoes of 500 cu. yds. delivered alongside dock New York City.

SAND.—The sand business continues to improve. The demand is excellent and in spite of the wet weather, June was a record month as far as production was concerned. Practically all dealers in sand voice the same opinion and it is expected that the good business will continue through the Summer at least. Prices are without change. Standard grades of Long Island washed sand are quoted at 35 cts. per cu. yd. delivered alongside of dock.

White quartz sand is 58 to 62 cts. per cu. yd. and white quartz grit 75 cts. per cu. yd.

GRAVEL.—Never has the demand for gravel been so active as this season. The principal seller of Long Island washed gravel reports a large volume of business with a new high record, as far as production is concerned, being made each month. Prices are working higher and for best grades of washed gravel, 80 to 85 cts. per cu. yd. is quoted for full cargo lots of 500 cu. yds. delivered alongside of dock.

White quartz roofing gravel is $1.25 to $1.35 per net ton.

IRON AND STEEL.

PIG IRON.—The buying of pig iron during June was good. Sales for very large tonnages for forward delivery were made by the leading Southern producers about the middle of the month. This business was taken for all parts of the country, New England machinery manufacturers being large purchasers and the same is true of industries in allied lines in the middle West. Some of the large manufacturers of sanitary enameled ware made extensive purchases and the cast-iron pipe interest were likewise free buyers. All of the iron sold, however, was at comparatively low prices. Consumers did not purchase unless they could secure a favorable quotation, and in many instances special prices were named. Most of the business for the third quarter delivery, at least, was done on a basis of $11.50 Birmingham. The Southern market was by far the most active of any of the great pig-iron centers, but at the quoted price the margin between the cost of manufacture and the selling price is so small that, with the exception of the three leading producers, there is little or no money to be made. Steel making irons were quiet and the business taken was at comparatively low figures. This, however, was not a feature of the buying last month, for the foundry iron trade was by far the most conspicuous. The leading steel manufacture is operating about 80% of its blast furnace capacity. This interest never operates to full capacity, the highest ratio being 95% of its furnaces in blast. It is becoming evident that should prices recede much further, another program of blowing out furnaces would be quickly put in force and the present Birmingham price is very near the minimum at which the interests in that district will operate.

Prices have not receded much, but at the following quotation the market is barely firm. These prices are for lots of 100 gross tons and over f. o. b. the points named: Cincinnati Southern foundry No. 1, $15.25 to $15.75; Southern foundry No. 2, $14.75 to $15.25; Southern foundry No. 4, $14.25 to $14.50. In Philadelphia, Eastern Pennsylvania No. 2 X foundry is $16.50 to $17; Eastern Pennsylvania No. 2 X plain foundry, $16.25 to $16.50. In Chicago, Northern foundry No. 2 is $16.75 to $17.25 and Southern No. 2 is $15.85 to $16.35. In Pittsburg, Bessemer iron is $16 to $17.25 and basic, $15.50 to $15.75. These quotations include the 90-ct. freight rate from the valley. In New York No. 2 X Northern foundry is $16.50 to $16.75, the Birmingham price as stated is $11.50 for No. 2 foundry for the third quarter delivery, and it is probable that deliveries extending through the second half could be obtained at this figure although the quotation is nominally $12.

STEEL RAILS.—The orders for rails taken by the mills for the last month have chiefly been for light sections. The mills are fairly busy on old orders, specifications coming in with considerable freedom. Several trolley companies have bought fair-sized amounts of rails and some business has been taken for terminal work.

Quotations are without change, the following prices being named for lots of 500 tons and over, carload lots being held at 50 cts. a ton additional; these quotations are f. o. b. mill: Standard sections, 50 to 100-lb., $28; 40 to 45-lb., $27; 30 to 35-lb., $27.50 to $28.50; 20 to 25-lb., $27.25 to $28.25; 12 to 14-lb., $29; 8 to 10-lb., $32. Relaying rails can be had cheaper at $20 to $21 in New York, but in Chicago are $24 to $25.

TRACK SUPPLIES.—Conditions are far from satisfactory in the line of track supplies and most of the business is for repair work. It is evident that the railroads are curtailing in this respect. This is particularly noticeable in the demand for spikes, and also tie plates. The spike orders coming in are practically limited to repair work. This, however, is much heavier than last year, the maintenance forces being fairly active.

Prices continue without change. Standard railway spikes, 4½ × 9/16-in. and larger, are quoted at 1.80 to 1.85 cts. per lb. Boat spikes are 1.80 cts. base. These prices are for carload lots and larger f. o. b. mill, 10 cts. per 100 lbs., advance being charged for small lots. Track bolts with square nuts are held at 2.30 to 2.50 cts. per lb., and angle bars 1.50 to 1.55 cts. per lb. in Chicago and Pittsburg.

STRUCTURAL SHAPES.—Business in this line has been excellent. Numerous orders have been taken for all kinds of structural work and the low prices quoted have been an inducement to many interests to close contracts. While the railways have not been as large buyers of steel as was expected, there have been, however, numerous bridge orders placed in the Chicago market, these being the bridges that were refigured during April and May. Some of the largest orders taken include the bridge across the Ohio, calling for 15,000 tons of shapes, the replacing of

the Victoria bridge across the St. Lawrence at Montreal, involving 15,000 to 20,000 tons, a bridge across the Mississippi at St. Paul, 4,000 tons, and the Arkansas River bridge at Ft. Smith, calling for 4,500 tons. A number of small bridges have also been contracted for and there has been considerable building work. This has been especially noticeable outside of New York.

The item of greatest interest was the contract for the Isthmian Canal lock gates, awarded to the McClintic-Marshall Construction Co., Pittsburg, at $5,374,474. This bid was more than 10% less than the nearest competitor. It will call for approximately 59,000 tons of steel shapes and plates, which will be rolled and furnished by the Jones & Laughlin Steel Co., and will cover a period of about three years.

The business placed during June amounted to at least 175,000 tons, exclusive of this contract. Prices are weak and lower, being quoted as follows in cents per pound, f. o. b. Pittsburg: I-beams, and channels, 3 to 15-in., 1.45 to 1.50 cts.; over 15-in., 1.60 cts.; H-beams over 8-in., 1.70 cts.; angles, 3 to 6-in., 1.55 cts.; over 6-in., 1.60 cts.; zees, 3-in. and over, 1.55 cts.; deck beams and bulb angles, 1.80 cts.; hand rail tees, 2.80 cts.

Chicago store prices in cents per pound are as follows: Angles, 3 to 6-in., 1.90 to 2 cts.; over 6-in., 2 to 2.10 cts.; I-beams and channels, 1.90 cts. In San Francisco prices from store are without change at 2.70 cts. basis.

OLD MATERIAL.—The market has gone from bad to worse. Prices are lower and the limited demand has been still further restricted by several rolling mills appointing a general purchasing agent to buy all of the needed material. In this way they are able to secure much lower quotations than when bidding against one another, and the dealers of scrap are left with no alternative because there are only one or two buyers. This applies, of course, to steel scrap, and there is an unusual quantity of this coming into the market just at present owing to the wrecking of the Grand Central Station in New York City. This will throw at least 25,000 tons of material on the market. In New York and vicinity prices are as follows per gross ton: Re-rolling rails, $12 to $12.50; heavy melting steel scrap, $11.50 to $12; No. 1 yard wrought, $11.50 to $12.50; No. 1 railroad wrought, $13.50 to $14; pipes and flues, $12 to $12.50; cast borings, $6.50 to $7; wrought turnings, $7 to $7.50; machinery cast broken up, $12 to $12.50; stove plate, $9 to $9.50.

In Chicago, complaint is heard of the glut of material coming on the market, the railways having been large sellers of scrap during the last month. Quotations are as follows per gross ton: Re-rolling rails, $16.50 to $17; heavy melting steel scrap, $13 to $13.50; shoveling steel, $12.50 to $13. For such materials as are sold by the net ton, prices are as follows: Miscellaneous railroad wrought, $11.75 to $13.25; machine shop turnings, $8 to $8.50; cast and mixed borings, $5 to $5.50; No. 1 cast scrap, $13 to $13.50; pipes and flues, $9.50 to $10; railroad malleable, $12 to $12.50; agricultural malleable, $11.50 to $12.

Some of the large consumers of scrap located in the Pittsburg district were heavy buyers during the month of June, but are understood to have all of the material needed for some time to come. Quotations per gross ton are as follows: Re-rolling rails, $16 to $16.25; No. 1 foundry cast, $14 to $14.50; No. 2 foundry cast, $13.25 to $13.50; old grate bars, $11 to $11.25; old car wheels, $14 to $14.25; cast borings, $8 to $8.25; machine shop borings, $9.75 to $10; bundle steel scrap, $10.50 to $10.75.

CAST-IRON PIPE.—Prices of cast-iron pipe have kept up in a way very satisfactory to the founders. Business taken during June, while not as much as that booked during earlier months, was much better than in some other lines. A peculiarity of the business which has been noted throughout the year is the orders for small lots from various consumers. The railroads have bought quite a little pipe this spring, probably more in the aggregate than ever before. No noteworthy orders have come out during the month, but tonnage on the books of manufacturers is very satisfactory and no especial efforts have been made to secure business. The New York Board of Water, Gas and Electricity bought 600 tons of pipe and special castings at $23.50 per ton, delivered, for the pipe and $48 for special castings. The order included 210 tons of 6-inch pipe, 230 tons of special castings and 160 tons of valve gates.

Prices have been shaded to the extent of $1 a ton in Birmingham, where 4 to 6-in. is quoted at $23 f. o. b. cars at foundry; 8 to 12-in., $22; over 12-in., $21.

In Chicago 4-in. is $28.50; 6 to 12-in., $27.50; 16-in. and larger, $26.50. For New York City delivery 6-in. is quoted at 50 cts. per ton lower, at $25 to $25.50.

Gas pipe is held at $1 per ton advance in all markets.

Specials are $50 to $60 per net ton.

PLATES.—Business in this line has been good. There have been numerous car orders placed during the month and a large amount of business has been booked for steel under frames. It is true that the railroads are attempting to curtail expenditures, but nevertheless the Southwestern lines have bought a large number of cars and the Baltimore & Ohio has also entered the market and purchased freely. A large tonnage of plates will be required for the Panama Canal lock gates, referred to in another part of this report. Makers of riveted steel pipe will purchase 30,000 to 40,000 tons of plates. There has been considerable activity in this kind of pipe. Tank makers, too, have made numerous purchases. Little shipbuilding work, however, is underway, although two new battle ships have been authorized by Congress.

A softening in the price has been noted and it is possible to secure plates at least $1 a ton under the quotations ruling last month. We quote as follows f. o. b. mill in cents per pound: ¼-in. thick, 6¼ to 100-in. wide, 1.45 to 1.50 cts.; ¼ to 3/16-in. thick, 1.55 to 1.60 cts.; 3/16 and thinner, including No. 8 gage, 1.60 to 1.70 cts.; Nos. 8, 9 and 10 gage, 1.75 to 1.80 cts.

In Chicago, store prices are 1.90 to 2 cts.

STEEL CASTINGS.—The good business noted last month has continued and the manufacturers of steel castings are busy. It is difficult to obtain some orders with the promptness desired by consumers. Prices continue without change. Open hearth castings weighing from 100 to 500 lbs. are 3.50 to 5 cts. per lb. Crucible castings weighing within the same limits are 7.95 to 9 cts. per lb.

RIVETS.—Business taken by the manufacturers of cars and fabricators resulted in quite a little activity in the rivet market.

Prices are steady and there is a sufficient supply to promptly supply the demand. Structural rivets, ¾-in. and larger, are 2.15 cts., base; cone head boiler rivets, ¾-in. and larger, 2.25 cts., base; ⅝-in. and 11/16-in. take an advance of 15 cts., and ½-in. and 9/16-in. take an advance of 50 cts.; in lengths shorter than 1 in., also take an advance of 50 cts. The above prices are absolutely minimum on contracts for large lots, makers charging the usual advance of $2 to $3 a ton to the small trade.

WIRE ROPE.—Prices of wire rope continue unchanged from last month. The discount to the larger trade being 42½ and 5% from list for galvanized, and 50 and 5% from list for bright. The net prices of bright wire rope are as follows:

Diameter inches.	Price per foot— Cast steel.	Crucible steel.	Plow steel.
2¾	$1.05	$1.24	$1.46
2½	.85	1.05	1.22
2	.57	.65	.76
1¾	.44	.54	.64
1½	.32	.39	.45
1¼	.23	.28	.32
1	.15	.18	.21
¾	.10	.11	.13
⅝	.07	.09	.10
½	.06	.07	.07

PILING SHEET STEEL.—Business is fairly active, although no large tonnages have been contracted for. Prices are somewhat easier and it would be possible to get standard piling at 1.55 to 1.65 cts. per lb. f. o. b. Pittsburg.

CASTINGS, GREY IRON.—Building castings are in fair demand. Such work as column caps for mill construction seems to be more active than usual, although columns are dull. Prices are without change at 1.75 to 2 cts. per lb. For column work in large building, probably 1.65 cts. could be done. Stair work is unchanged at 2 to 2.25 cts. per lb. Rough castings, such as sewer work, manhole covers, and general castings of large size are 1.50 to 1.75 cts. per lb.

ROOFING, CORRUGATED.—Very little complaint is heard by the manufacturers of sheets, but jobbers continue to voice the opinion that business is dull. This apparently indicates, while general manufacturing establishments using sheets are busy, the building trade is quiet. Corrugated sheets are likewise quiet, but there is a fair demand.

Quotations are unchanged from last month and for 100 sq. ft. of roof surface are as follows: Carloads, Pittsburg, No. 28 painted, $1.70; No. 28 galvanized, $3. From store, New York, No. 24 painted, $3.85; galvanized, $4.80; No. 26 painted, $2.95; galvanized, $4; No. 28 painted, $2.60; galvanized, $3.75.

FREIGHT RATES.—The freight rates, on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per 100 lbs.; Albany, 16; Buffalo, 11; Boston, 18; Baltimore, 14½; Canandaigua, 13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochetser, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

TIN PLATE.—In the month of June a new high record for the output of tin plate was established. Practically 90% of the business done has been in the bright tin plate trade, being material for canners and the box trade. Terne plates have been quiet. The wage scale has been the subject of considerabel controversy and there are few independent mills who have not yet come to an agreement with the Amalgamated Association on the subject. This association, however, is not nearly as strong as it was in former years, and no trouble is anticipated, particularly as the season's work is nearly finished.

Terne plates or tin plates used for roofing purposes are sold by the box of 112 sheets. Store prices in New York are without change at $8.50 per box for 20 × 28-in. I C plates with an 8-lb. coating; plates of the same size with a 15-lb. coating are $10.40; 20-lb. coating, $13 and 40-lb. coating, $16.50.

COKE.—Prices of coke are somewhat firmer, the low quotations of last month having filled up the order books of the weaker concerns and the reduction in the number of ovens operated is restricting the output to a considerable degree. For best grades of furnace coke running under 1% in sulphur on contracts extending through the rest of the year, $1.80 to $1.85 is named at oven. Some coke is available for immediate shipment at $1.65 to $1.70. Foundry coke is easier and the best grades of 72-hr. foundry coke are obtainable at $2.15 to $2.40 per net ton. The output of coke has been materially restricted, being less than 400,000 tons weekly in the upper and lower Connellsville region.

NAILS.—While there is a very fair demand for nails in the West, there is little inquiry in the East. The mills are able to supply the demand with unusual promptness.

Prices per 100 lbs. are without change, as follows: In carload lots to jobber, $1.80; to retailers, $1.90; less than carloads to jobbers, $1.90; to retailers, $2. In New York small lots are sold at $2.10. Cut nails are quoted $1.85 base Pittsburg and $2.10 base New York store.

SHEETS.—Business in the sheet line is more satisfactory than a month ago, the demand having improved during the last fortnight. Concessions of $2 to $3 a ton continue, but they are not as common as last month. Galvanized sheets are in relatively better demand than any other, except blue annealed and electrical sheets. Shipments are being made in four and six weeks after specifications are received.

Prices for mill shipments of carload lots are as follows:

	Cts. per lb. Black.	Galvanized.
Nos. 3 to 8	1.70	...
Nos. 9 and 10	1.75	...
Nos. 11 and 12	1.80	...
Nos. 13 and 14	1.85	2.50
Nos. 15 and 16	1.95	2.60
Nos. 17 to 21	2.20	2.75
Nos. 22 and 24	2.25	2.90
Nos. 25 and 26	2.30	3.10
No. 27	2.35	3.30
Nos. 28	2.40	3.50

Store prices Chicago are as follows:

	Cts. per lb. Black.	Galvanized.
No. 10	2.30	3.25
No. 12	2.35	
No. 14	2.40	
No. 16	2.50	3.35
Nos. 18 and 20	2.85	3.40
Nos. 22 and 24	2.90	3.55
No. 26	2.95	3.70
No. 27	3.00	3.95
No. 28	3.10	4.15
No. 30	3.30	4.55

WIRE.—Business in both barb wire and fence wire is more active than a month ago, and purchases of wire by farmers were considerably larger than were expected. The mills, however, are able to supply the demand with considerable ease.

The base prices, to retailers f. o. b. Pittsburg, are as follows: Carloads, annealed, $1.70; galvanized, $2. Less than carloads, annealed, $1.80; galvanized, $2.10.

Barb wire painted is $1.95 for carloads, and $2 for smaller quantities; galvanized is $2.20 for carloads and $2.30 for small lots.

Staples are $2.43, Chicago, to retailers in less than carload lots. All of these prices are per 100 lbs.

MERCHANT PIPE.—The largest order for pipe booked during the month was from the Gulf Refining Co., which placed a contract with the National Tube Co. for about 100 miles of 6-in. line pipe. This will be used for an oil line in Texas. Outside of this, business is very quiet and one of the mills, of the leading interest, at Wheeling, Ohio, has shut down. The Republic Iron & Steel Co. is operating one lap weld furnace in its new mill at Lansingville, Ohio, where it is making pipe up to six inches in diameter. Another lap weld furnace will be put in operation shortly.

The regular discounts on iron and steel pipe are only fairly firm as follows: ¾ to 6-in. black, 78%; ¾ to 6-in. galvanized, 68%; 7 to 12-in. black, 72%; 7 to 12-in. galvanized, 57%. At these discounts the net prices of pipe per foot, are as follows:

	Steel Pipe in Cts. per ft. f. o. b. Mill. Black.	Galvanized.
¾-inch	2.53	3.68
1 -inch	3.63	5.28
1¼-inch	4.95	7.20
1½-inch	5.94	8.64
2 -inch	7.92	11.52
2½-inch	12.67	18.30
3 -inch	16.61	24.16
4 -inch	23.76	34.56
5 -inch	32.90	46.30
6 -inch	42.36	60.16
7 -inch	65.80	101.05
8 -inch	70.00	107.50
9 -inch	95.20	146.20
10 -inch	112.00	172.00
11 -inch	126.00	193.50
12 -inch	137.20	210.70

SWEDISH STEEL.—The demand is fair and the difficulty, noted early in the year, of obtaining prompt shipments, has disappeared. Prices are without change as follows:

Drill steel, either round, hexagonal or octagon, is 6 cts. per lb. for all sizes ⅝ to 2 ins. For sizes 2⅛ to 3 ins. 7 cts. is quoted and 3⅛ to 4 ins. is 7½ cts.

Hollow drill rod is held at 12½ to 15 cts. for the imported.

Anvils of Swedish steel are held at 9 to 9½ cts. per lb. They weigh from 80 to 600 lbs.

SWITCH POINTS.—The demand is only fair. The following prices are named f. o. b. mill for switch points in lots of ten or more pair: For 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $22.50; for 70-lb. rail, 10-ft. points, $18; 15-ft. points, $25; for 80-lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $30.50; for 100-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60 or 70-lb. rail, which have only two.

LAG SCREWS.—Prices continue unchanged from last month. Cone point lag screws are sold at a discount of 75 and 10% from list. Net prices are as follows:

	Net Price per 100— ¼-inch.	¾-inch.	1-inch.
3½-inch	$1.17	$2.40	$5.00
4 -inch	1.25	2.55	5.25
4½-inch	1.33	2.70	5.50
5 -inch	1.40	2.85	5.80
6 -inch	1.58	3.20	6.40
7 -inch	1.73	3.50	7.00
8 -inch	1.82	3.85	7.60
9 -inch	2.05	4.10	8.20
10 -inch	2.25	4.45	8.75
11 -inch	2.40	4.70	8.30
12 -inch	2.60	5.00	9.90

BARS AND MERCHANT [illegible]PES.—Little complaint, regarding the vo[illegible] of business, is heard from manufactur[illegible] but jobbers have few orders. Prices ar[illegible]out change as follows:

	Cts. per lb.
1 to 1⅞-in. round and sq[illegible]	1.90
1½ to 4-in. × ⅜ to 1-in.	1.90
1½ to 4-in. × ¼ to 5/16-in.	2.10
Rods—⅝ and 11/16 round & [illegible]	2.10
Angles:	
3-in. × ¼-in. and larger	2.10
3-in. × 3/16-in. and ⅛-in.	2.35
1½ to 2½-in. × ⅛-in.	2.35
1½ to 2¾-in. × 3/16 in. & th[illegible]	2.10
1 to 1¼ × 3/16-in.	2.20
⅞ × ⅛-in.	2.40
¾ × ⅛-in.	2.50
⅝ × ⅛-in.	3.55
½ × 3/32-in.	4.35
Tees:	
1-in.	2.65
1¼-in.	2.45
1½ × 2¼ × ¼-in.	2.15
1½ × 2½ × 3/16-in.	2.35
3-in. and larger	2.15
Beams	2.10
Channels, 3-in. and larger	2.10
Bands—1½ to 6 × 3/16 to No.	2.35
Norway bars	3.60
Bessemer Machinery, Steel	1.90
Cast steel, base	7.00
Special cast steel, base	14.00 to 15.00

CHAIN.—The following quotations are named on chain. The volume of business is less than normal and prompt shipments can be made.

Prices are without change per 100 lbs. f. o. b. Pittsburg, as follows:

Sizes in inches.	Proof.	BB.	BBB.
3-16	$8.25	$9.50	$10.00
¼	5.70	6.95	7.45
5-16	4.70	5.95	6.45
⅜	4.15	5.40	5.90
7-16	3.85	5.10	5.60
½ and 9-16	3.65	4.90	5.40
⅝	3.55	4.80	5.30
¾	3.45	4.70	5.20
⅞	3.35	4.60	5.10
1	3.25	4.50	5.00
1¼ and 1⅛	3.35	4.60	5.10

Hand-Made Chain.

Size in inches.	BBB crane chain.	BBB crane, dredge hoisting or steam shovel hoisting chain.	Special "Warwick" crane, hoisting steam shovel hoisting and dredge hoisting chain.	Special "Trident" crane, steam shovel hoisting and dredge hoisting chain.
⅝	$7.95	$8.20	$9.15	$9.15
¾	7.15	7.45	8.45	8.45
⅞	7.67	6.90	7.95	
1	6.15	6.40	7.45	
1⅛	5.75	5.95	6.90	
1¼	5.65	5.90	6.85	
1⅜ to 1⅞	5.55	5.75	6.80	

SPIRAL RIVETED PIPE.—Prices continue unchanged from the last report. The prices given below are f. o. b. factory, freight equalized, with New York City being figured at a discount of 50, 10 and 10% from list. They are for orders amounting to about $250. For large orders, of several carloads, prices are from 12½% to 20% cheaper.

Diameter in ins.	*Thickness of steel, Birmingham wire gage	Net Price per 100 ft. With bolted joints complete. Plain.	Asphalted.	Galvanized.
3	20	$21.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.49	25.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.32
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.39
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.26	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	339.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

FROGS.—For mill shipments, of ten or more, prices are as follows: Bolted frogs No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50. No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50; for 100-lb. rail, $27.50.

BOLTS.—Prices are without change. The discount on common carriage bolts, to the retail trade and larger consumers, is 70 and 7½% from list, on bolts ⅝ × 6 ins., and smaller. The lowest price is 65 and 5% discount for larger and longer bolts. Net prices are as follows:

Length in inches.	Diameter in inches— Net price per 100. ⅜	½	¾
4	$0.74	$1.22	$2.86
5	0.83	1.36	3.15
6	0.92	1.52	3.50
7	1.22	1.65	3.75
8	1.34	1.80	4.25
9	1.45	1.95	4.50
10	1.55	2.20	4.75
12	1.75	2.40	5.25
14	1.90	2.70	5.90
15	2.05	2.85	6.25
18	2.40	3.25	7.20
20	2.60	3.50	7.75

REINFORCING MATERIALS.

TRIANGULAR MESH.—Business is excellent and the orders taken are large. The only reason there is no shortage of material is because of the dullness of other lines. It is believed that some new competition will appear in the line of wire reinforcing and lower prices might be named. The quotations of last month are without change as follows:

Price per 100 sq. ft.

Style No.	Cross sec. area per ft. width.	Carload lots.	Smaller quantities.
4	.102	$1.03	$1.25
5	.077	.82	.99
6	.058	.65	.78
7	.041	.50	.61
23	.170	1.73	2.08
24	.142	1.48	1.80
25	.124	1.32	1.60
26	.110	1.20	1.45
27	.085	.98	1.19
28	.066	.81	.98
29	.049	.67	.81
31	.261	2.55	3.08
32	.225	2.20	2.67
33	.196	1.96	2.38
34	.146	1.51	1.82
35	[illegible]	1.20	1.45
36	.075	.89	1.07
38	[illegible]	3.62	4.38
39	[illegible]	3.12	3.77
40	[illegible]	2.74	3.30
41	.208	2.08	2.52
42	.151	1.58	1.92
43	.101	1.13	1.36

This material is made in regular widths of 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

EXPANDED METAL.—Prices are firm and business is active. The following table of prices are for small lots from the warehouse, either New York or Pittsburg. Material concessions, however, will be made for large orders.

Mesh, ins.	Gage (Stubs).	Section in sq. in. per ft. width.	Weight, in lbs., per sq. ft.	Size of Standard Sheets in ft.	Price per sq. ft. f.o.b. New York.
¼	18	.209	.74	8 × 3 or 6 ft.	5.5
¾	13	.225	.80	6 × 8 or 12 ft.	6.2
1½	13	.207	.70	4 × 8 or 12 ft.	5.5
2	12	.166	.56	5 × 8 or 12 ft.	4.8
3	16	.083	.28	6 × 8 or 12 ft.	2.4
3	10	.148	.50	5.25 × 8 or 12 ft.	2.6
3	10	.178	.60	6 × 8 or 12 ft.	2.8
3	10	.267	.90	4 × 8 or 12 ft.	3.8
3	10	.356	1.20	6 × 8 or 12 ft.	5.
3	6	.400	1.38	3.5 × 8 or 12 ft.	6.2
3	6	.600	2.07	4.66 × 8 or 12 ft.	8.3
4	16	.093	.42	4.5 × 8 or 9 ft.	2.8
6	4	.245	.84	5 × 8 or 12 ft.	3.7
6	4	.368	1.26	5 × 8 or 12 ft.	5.

EXPANDED LATH.—Prices are firm and in some quarters higher prices are quoted. In general, however, lath can be had at the old figure. The price for carload lots given below is f. o. b. mill central Ohio:

Carload Lots. Price in cts. per sq. yd.

Gage.	Weight per sq. yds.	Black.	Painted.	Galvanized.
27	2¼ lbs.	11½	12¼	17½
26	2½ lbs.	12½	13¼	18½
25	3 lbs.	13½	14¼	19½
24	3.4 lbs.	14½	15¼	20½

Small Lots from New York, Store.
Prices in cents per sq. yd.

Gage.	Black.	Painted.	Galvanized.
27	13	13¾	19
26	14	14¾	20
25	15	15¾	21
24	16	16¾	22

This lath is packed 9 sheets to the bundle.

DIAMOND LATH FROM STORE.

Designation.	Gage.	Weight per sq. yd.	Price, Per sq. yd. Black, cts.
A	24	4 lbs.	20
A Special	24	4 lbs.	18
B	27	2.9 lbs.	16½
B Special	27	2.9 lbs.	15
B B	27	2.33 lbs.	14
Square Twist	24	4. lbs.	20
Diamond No. 24	..	3.75 lbs.	20
" No. 24 Special	..	3 lbs.	16½
" No. 26	..	2.66 lbs.	16½
" No. 26 Special.	..	2.1 lbs.	14
Square Twist No. 27	..	2.75 lbs.	14½

INTERLOCKING PLATES.—For interlocking steel plates, of 24 gage black steel f. o. b. mill central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price Flat Sheets.
Under 4 ft.	100 lbs.	$11.00
4 to 6 ft.	160 lbs.	10.00
6 to 8 ft.	160 lbs.	9.50
8 to 10 ft.	160 lbs.	9.00
10 ft.	160 lbs.	8.50

Curved sheets are held at an advance of $1 per 100 sq. ft. over flat.

For a desirable order prices might be shaded about 10%.

BARS, CONCRETE REINFORCING.—The demand for bars is very good and it is difficult to obtain prompt or early deliveries on soft steel bars. For hard bars the demand is fair, but some of the mills will close down during the present month. The implement makers and wagon builders made heavy contracts last month, covering their requirements for the last half of the year. Concrete bars are in active demand, but it is easy to get shipments within a comparatively reasonable time. It is generally admitted that 1.45 cts. is accepted as the base price by practically all interests. The net prices of bars of various size, based on the 1.45 ct. quotation are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.45 to 1.55	1.50 to 1.60
⅝-inch	1.50 to 1.60	1.55 to 1.65
½-inch	1.55 to 1.65	1.60 to 1.70
⅜-inch	1.70 to 1.80	1.75 to 1.85
¼-inch	1.95 to 2.05	2.00 to 2.10

Bar from stock Pittsburg are usually cut to the required length without extra charge. Prices are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.65 to 1.75	1.75 to 1.85
⅝-inch	1.70 to 1.80	1.80 to 1.90
½-inch	1.75 to 1.85	1.85 to 1.95
⅜-inch	1.90 to 2.00	2.00 to 2.10
¼-inch	2.15 to 2.25	2.25 to 2.35

*The price of deformed bars varies according to the shape and some are held much higher than these prices.

Twisted bars are held at an advance of 10 to 25 cts. over plain bars.

The base price on plain bars from store, Chicago, is 2 to 2.10 cts.

CLAY PRODUCTS.

SEWER PIPE.—The volume of business booked by sales agents in the New York territory has fallen off to a marked degree within the last four weeks. It may be called the usual midsummer dullness, but, if such is the case, it has come earlier than usual.

Discounts continue unchanged from those previously reported. Those applying to the "Eastern List" are as follows: 86% for sizes up to 24-in.; 78% for 27 and 30-in. and 73% for 33 and 36-in. At these discounts the net price per ft. for carload lots f. o. b. factory, are as follows:

2 & 3-in.	$0.028	18-in.	$0.267
4-in.	.035	20-in.	.315
5-in.	.042	21-in.	.378
6-in.	.056	22-in.	.42
8-in.	.077	24-in.	.455
9-in.	.091	27-in.	.99
10-in.	.112	30-in.	1.20
12-in.	.14	33-in.	1.70
15-in.	.19	36-in.	1.89

HOLLOW WALL TILE.—Business in this line continues good. While the activity is most pronounced in New York, still the demand from other parts of the country is good. The difficulty of obtaining prompt shipments noted last month has disappeared and now deliveries are made within a reasonable time.

Quotations continue unchanged from last month, and for hollow wall building tile, f. o. b. factory, Perth Amboy, N. J., prices are as follows:

Size.	Price per block, in cts.
4 × 12 × 12-in.	5.25
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.9
10 × 12 × 12-in.	10.5
12 × 12 × 12-in.	12.1

Fireproofing partition blocks are unchanged as follows:

Size.	Price per block, in cts.
2 × 12 × 12-in.	4.4
3 × 12 × 12-in.	4.4
4 × 12 × 12-in.	5.
6 × 12 × 12-in.	6.6
8 × 12 × 12-in.	8.8

These prices are for what would be considered small orders—approximately carload lots. For quantities which exceed $1,000 worth of material, concessions will be made.

ROOFING TILE.—The demand continues fair. Prices are steady, and, although firm, continue without change. The best grade of promenade roofing tile in flat blocks for high grade roofs is sold at $20 per M. for run of kiln and $30 per M. for selected. A cheaper form of tile with a smooth face can be had at $10 to $12, but it is not suitable for roof gardens. These prices are for 9 × 9 blocks f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $4 to $5 for the smooth blocks; $7.82 for the run of kiln, and $10.73 for the selected.

Vitrified tile unglazed, of the French or Spanish type, is sold at approximately $8.50 per 100 sq. ft. of roof surface f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

DUCT TELEPHONE.—A great deal of work, where telephone duct is used, is now under way and business is very active.

Prices are unchanged, small lots being sold at 4½ to 5 cts. per duct ft. for delivery in New York City, but on desirable orders this figure would be considerably shaded.

FLUE LININGS.—Business is fair, and prices continue without change. The discount from list, f. o. b. mill, is 85%, delivered in New York; in small lots, they can be had at 78%. Based on a discount of 85% at the mill net prices are as follows:

	Weight in lbs.	Price per ft.
4½ × 8½-in.	14	$0.04½
4½ × 13-in.	20	.068
4½ × 18-in.	40	.15
6 × 12-in.	22	.075
7 × 7-in.	15	.053
8½ × 8½-in.	18	.068
8½ × 13-in.	28	.098
8½ × 18-in.	45	.135
12 × 16-in.	45	.15
13 × 13-in.	38	.128
13 × 18-in.	57	.18
14 × 16-in.	60	.165
16 × 16-in.	65	.24
16 × 20-in.	80	.30
18 × 18-in.	75	.30

MILL SUPPLIES.

SHAFTING.—The automobile manufacturers who were large buyers during the Spring months have satisfied their requirements and although shipments are being made freely on old contracts, there is very little business coming out. Trade is duller than it has been any time this year. Prices are unchanged from last month at 52½ to 55% discount from list for carload lots. Small lots are held at 50% discount.

The following net prices per foot are based on the 50% discount: ¾-in., 4.15 cts.; 1-in., 7.30 cts.; 1¼-in., 11.50 cts.; 1½-in., 15 cts.; 1¾-in., 20.50 cts.; 2-in., 25.50 cts.; 2¼-in., 38.75 cts.; 2½-in., 41.75 cts.; 2¾-in., 50 cts.; 3-in., 60 cts.; 3½-in., 90 cts.; 4-in., $1.27½; 4½-in, $1.78; 5-in., $2.35; 5½-in., $3; 6-in., $3.85.

CHAIN BELTING.—Prices are unchanged, as follows:

From 3 HP. to 10 HP., 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP. to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

PACKING.—Valve and stuffing box packing is unchanged at the following prices per pound:

Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts.; Jenkin's "96" packing, 60 cts. Cotton packing can be had at 16 to 25 cts.; jute at 3¼ to 3½ cts., and Russian at 9 to 10 cts.

GRAPHITE LUBRICANTS.—An improvement is noted in the demand for lubricants of this character, but shipments are being made promptly. Prices are as follows:

Engine flake graphite, 12 cts.; oiled graphite, 20 cts.; car box grease, 8 cts.; gear grease, for electric cars, 4¼ cts.; cup grease, 15 cts.; axle grease, 8½ cts.; automobile graphite grease, 16 cts.

Large consumers and jobbers can obtain considerable concession from these figures.

HIGH SPEED STEEL.—Business is good and makers of well-known brands have a fair run of orders. Prices range from 50 to 65 cts. per lb.

LUBRICATING OILS.—Business is mostly for large lots, there being few small orders. The following prices prevail to large consumers of approved credit who buy in 5-bbl. lots or larger:

	Cts. per gal.
*Cylinder, light filtered	23 to 32
*Cylinder, dark	20 to 27
*Cylinder, steam refined	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemons 33 to 34 gravity	17 to 19
Dark, 32 gravity	15 to 18
Crank Case oil	15 to 17

*Prices vary according to test.

BELTING.—The good demand for belting noted last month continues, but it is evident that the leather belting trade is not in as good position as it was. The price of leather is not at all firm and it would not be surprising if there were sharp reductions. It is true, hides are scarce, but prices have receded and it is rumored that there are large stocks in the West. Discounts on leather belting are unchanged, as follows: Extra heavy, 55%; heavy, 60%; medium, 60 and 10%; light, 60, 10 and 10%; shoulder, 75%; standard, 70 and 10%.

A further advance has been made in the price of rubber belting, due to higher quotations for rubber. The best discounts obtained are 40% from list for the best grades or rubber belting, 60 and 10% for competition grades, and 40 and 10% for standard.

The net prices of rubber belting are given in the following table. As stated the prices of leather belting are unchanged from those printed on page 170 in the issue of May 5th.

Best Grade Rubber Belting, Net Price Per Ft.

Width, inches.	2-ply.	4-ply.	6-ply.	8-ply.
3	$0.16	$0.22	$0.33	.....
4	.21	.30	.45	.....
5	.26	.36	.55	.....
6	.30	.44	.65	$0.87
7	.36	.51	.75	1.01
8	.40	.57	.87	1.15
9	.46	.64	.98	1.30
10	.51	.72	1.01	1.44
12	.60	.86	1.30	1.71
14	.72	1.01	1.53	2.01
16	.83	1.17	1.76	2.35
18	.93	1.34	2.00	2.65
20	1.04	1.49	2.25	2.98
22	1.17	1.67	2.50	3.33
24	1.30	1.85	2.76	3.70
26	1.42	2.04	3.06	4.08
28	1.58	2.22	3.33	4.45
30	1.69	2.40	3.60	4.80
34	1.94	2.78	4.16	5.54
38	2.22	3.15	4.70	6.30
42	2.46	3.50	5.30	7.00
46	2.75	3.88	5.80	7.72
50	3.02	4.25	6.40	8.50
56	3.40	4.80	7.20	9.60
60	3.67	5.20	7.80	10.40

COTTON WASTE.—The demand for cotton waste is not at all urgent, owing to the high price, which is unchanged from our last report at 9 to 10 cts. per lb.

FIRE HOSE.—Prices of hose are without change. The standard grade of underwriter's cotton rubber-lined hose, ⅝-in. in diameter, warranted, 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½ ins. in diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

GRAVEL.

SKYLIGHT GLASS.—The demand continues good and it is noted that a great deal more of this kind of glass is used in the building construction than ever before, owing to the improvements made in skylights. Prices continue without change as follows:

Thickness, ins.	Price per sq. ft.
1/8	7 cts.
3/16	10 cts.
1/4	15 cts.

Wired skylight glass, ¼-in. thick, is 25 cts. per sq. ft.

VAULT LIGHTS.—Business is fair, with prices unchanged. Contractors furnishing their own molds can obtain glass at from 4 to 5 cts. per lb. Bull's eyes, 3-in. in diameter are 3 cts. each, and square lights, 3½ × 3½, are 5 to 6 cts. each.

WINDOW GLASS.—The leading manufacturers of window glass throughout the country report an increase in the volume of business booked, due probably to anticipated needs during the Summer season when the factories will be closed. Prices are firm, the general discount being 90% from list for all sizes of single and double strength. This discount applies to the jobbers' list of October 1, 1903.

The net prices per box of 50 sq. ft., at the discount named, are as follows:

American Window Glass.

Size of Glass, Ins.	Single Thickness. Price per box, 50 sq. ft. A.	B.
6 × 8 to 10 × 15	$2.40	$2.20
11 × 14, 12 × 13 to 14 × 20	2.52	2.40
10 × 26 to 16 × 24	2.70	2.52
18 × 22, 20 × 20 to 20 × 30	2.87	2.64
15 × 36 to 24 × 30	2.96	2.70
26 × 28 to 24 × 36	3.14	2.79
26 × 34, 28 × 32, 30 × 30 to 30 × 40	3.47	2.94
32 × 38, 34 × 36 to 30 × 50	4.00	3.46
30 × 52 to 30 × 54	4.27	3.76

PLATE GLASS.—While it is true that most of the large contracts that were booked last year have been filled, particularly for building work, there is some new business coming out. The trade though is more or less quiet. The discount from list continues unchanged at 90%.

In the accompanying table is given the net prices of polished plate glass of the size indicated, boxing being charged extra.

NET PRICES OF POLISHED PLATE GLASS IN DOLLARS.

Length. Feet.	Width, Feet 1.	1.5	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10
1	0.27	0.42	0.55	0.73	0.95	1.14	1.30	1.51	1.68	2.64	3.15	3.60	4.14	4.60
1.5	....	0.66	0.95	1.20	1.58	2.31	2.64	3.04	3.38	4.14	4.83	5.52	6.28	7.05
2	....	....	1.30	1.75	2.64	3.15	3.60	4.14	4.60	5.52	6.51	7.52	8.64	9.80
2.5	....	....	....	2.82	3.38	4.03	4.60	5.18	5.82	7.05	8.40	9.80	11.10	12.30
3	....	....	....	....	4.14	4.83	5.52	6.28	7.05	8.64	10.30	11.80	13.50	15.00
3.5	....	....	....	....	....	5.70	6.51	7.41	8.40	10.30	12.10	14.00	15.80	17.50
4	....	....	....	....	....	....	7.52	6.64	9.80	11.80	14.00	16.00	18.00	20.00
4.5	....	....	....	....	....	....	....	9.93	11.10	13.50	15.80	18.00	20.30	22.50
5	....	....	....	....	....	....	....	....	12.30	15.00	17.50	20.00	22.50	25.00
6	....	....	....	....	....	....	....	....	....	18.00	21.00	24.00	27.60	30.60
7	....	....	....	....	....	....	....	....	....	....	24.50	28.60	32.20	35.70
8	....	....	....	....	....	....	....	....	....	....	....	32.70	36.80	42.00
9	....	....	....	....	....	....	....	....	....	....	....	....	41.80	46.40
10	....	....	....	....	....	....	....	....	....	....	....	....	....	52.50
11	5.06	7.92	10.80	13.80	16.50	19.30	22.00	24.80	28.10	33.70	39.70	45.40	52.00	*71.50
12	5.52	8.64	11.80	15.00	18.00	21.00	24.00	27.60	30.60	36.80	43.30	50.40	70.20	78.00
13	6.05	9.56	13.00	16.30	19.50	22.80	26.60	29.90	33.20	40.20	47.80	67.60	76.10	123.50
14	6.51	10.30	14.00	17.50	21.00	24.50	28.60	32.20	35.70	43.30	51.50	72.80	119.70	161.00
15	....	....	....	....	....	26.80	30.60	34.50	38.30	46.40	68.30	78.00	155.30	180.00
16	....	....	....	....	....	36.40	41.60	46.80	52.00	62.40	72.80	121.60	172.80	224.00
17	....	....	....	....	....	38.70	44.20	49.80	55.30	66.30	77.40	156.40	214.20	323.00
18	....	....	....	....	....	41.00	46.80	52.70	58.50	70.20	119.70	172.80	307.80	342.00

PAVING MATERIAL.

ROAD OIL.—Never has the demand been so enormous for road oils of every description. From all parts of the country anxious inquiries are made regarding shipments. Fortunately the production of oil is increasing and the large oil refiners are endeavoring to find a market for their heavier products, such as road oils, and in consequence prices are steady.

Quotations are unchanged, 30% asphaltum oil being quoted at 4 cts. per gal. Texico macadam asphalt 90 to 95%, is 11 cts. per gal. f. o. b. New York or Philadelphia; A or X Tarvia in bbls. is 8½ to 9½ cts. per gal.; B grade in bbls. is 7 to 8 cts. per gal.

GRANITE BLOCK.—The quarries are so busy making shipments on old orders that there is little new business. It is doubtful that if any more blocks could be put in shape this year than have already been contracted for.

Prices continue unchanged as follows: Cape Ann granite blocks delivered in New York City, in the old style block is $1.60 to $1.75 per sq. yd. Dressed block to lay with ¼-in. joint is $2 to $2.10 per sq. yd.

ASPHALTUM.—Business is extremely quiet with prices more or less nominal. California brands are slightly higher, B grade being quoted at $28 and D grade at $25 delivered in New York. These correspond to a price of $17 and $14 respectively at point of shipment. Trinidad asphalt is coming on the market very freely because of a better supply of labor in the South. Prices are steady at $27 for the refined.

PAVING BLOCKS, WOOD.—Business is not as active as it was early in the Spring, nor have the orders taken by the leading manufacturers been up to expectations.

Prices continue without change as follows: For long leaf yellow pine blocks having not less than 20 lbs. oil per cu. ft., $1.85 is quoted for 3-in. block; $2.05 for 3½-in. block and $2.25 for 4-in. block. All these prices are per sq. yd. f. o. b. New York.

VITRIFIED BRICK.—Prices continue unchanged at 55 to 70 cts. per sq. yd. at point of shipment.

LUMBER.

The tendency of the lumber market during the last month has been downward and the quantity of lumber going into actual consumption was a keen disappointment not only to the distributors but the sawyers. It is evident that the cut last Winter was in excess of the demand, and there is more lumber in the yards of the mills and also distributors than will be called for during the present season. The unfavorable reports do not come from any particular part of the country, the same condition appearing to have been general through the East. In Buffalo there is an accumulation, and in New York City the Summer dullness began earlier than usual. In Boston the market is very quiet.

The freight rate situation is exciting much comment among lumber men in all parts of the country. It is recognized that there will be a readjustment in freights; how drastic no one can tell. There may be some reductions, but in the main it is expected that the advances will predominate. It is also recognized that some mills may be entirely cut off from their customary markets. The Southern mills particularly, which have had most advantageous freight rate, on the long haul, may be forced to ship by water. Coastwise transportation, however, is high, owing to the few vessels engaged in it.

To sum up the situation, the lumber industry is in the process of readjustment, and in spite of the favorable prices being made to retail distributors they are not willing, in view of the uncertainty, to load with supplies.

NORTH CAROLINA PINE.—The market is less firm than last month and the demand has fallen off to quite an extent.

Prices are as follows:

For pieces 20 ft. long and less, in car lots New York, prices per thousand are as follows:

Size.		Size.	
2 × 4-in.	$18	2 × 10-in.	$21
2 × 6-in.	18	2 × 12-in.	22
2 × 8-in.	18		

Roofing boards, either ship lapped or tongue and grooved, are without change from last month, as follows:

Size.		Size.	
13/16 × 5½ in.	$17.50	13/16 × 9½ in.	$19.00
13/16 × 7½ in.	18.00	13/16 × 11½ in.	20.00

Random width, between any two, take the price of the widest.

A decline in prices in Boston brings the price of 6-in. roofing board done to $17 to $17.50; 8-in. are obtainable at $18.50.

LONG LEAF YELLOW PINE.—The demand for long sticks in New York is good. There is a great deal of hand-to-mouth business which keeps the market fairly active, although no great inquiry is noted. For delivery from yard, New York and vicinity, classed "Merchantable" under the 1905 rules of the Association, prices are as follows:

Price per Thousand in Yard, New York.

Size.	Length: 20 ft. base.	21 to 25 ft.	26 to 30 ft.	31 to 35 ft.
8 in. wide and under by 8 in. thick and under	$31	$32	$33	$34
10 in. wide by 10 in. thick and under	33	34	35	36
12 in. wide by 12 in. thick and under	36	37	38	39
14 in. wide by 14 in. thick and under	43	44	46	46
16 in. wide by 16 in. thick and under	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft. add from $4 to $8 to base price.

SPRUCE.—Prices are slightly lower. Canadian and Adirondack spruce can be had at $23.50 to $24.50 for 2 × 4 to 2 × 8-in.; $26.50 is quoted for 2 × 9-in., and 2 × 10-in. can be had at $26.

West Virginia spruce is quiet, and although slightly lower prices might be obtained in some quarters, the general quotations are unchanged. For large lots, on track or delivered in the harbor New York, prices are as follows:

Size.	*Length, 10 to 20 ft.
2 to 4-in. thick by 4 to 8-in. wide	$27.00 to $28.00
2 to 4-in. thick by 10 to 12-in. wide	28.00 to 29.00
Sizes.	Length, 12 to 16 ft.
1 × 6 to 1 × 10	$28.00

*For each additional ft. in length, over 20 ft. add $1 per M.

Prices have again declined in Boston, building orders being quoted at $22.50. For 2 × 3-in. to 2 × 7-in. $19 to $20 is asked, and 2 × 8-in., $20 to $20.50.

SPRUCE BOARDS.—Prices are fully 50 cts. a thousand easier and the demand is limited. For Adirondack spruce delivered in car lots, New York, prices are as follows: 1 × 4-in., $24; 1 × 5-in., $24.50; 1 × 6-in. and 1 × 7-in., $25; 1 × 8-in., $25.50; 1 × 9-in., $27; 1 × 10-in., $27.50. Culls, or No. 3, can be had at $20 to $20.50.

Boston prices for "Merchantable" boards 5-in. and wider are $19 to $19.50 for short lengths and $21.50 to $22 for 12 ft.

FLOORING.—All flooring is sold at its actual width, but as laid, on account of the tongue and groove, it does not measure the full width. The following prices are for yard delivery of long-leaf yellow pine, the actual measurement being 13/16 × 2¼-in., but counted as 1 × 3-in.; A, sap, $43 to $45; A, flat, $31.50 to $32.50; common, $25.50 to $26.

FACTORY FLOORING.—Prices of tongue and grooved factory flooring of North Carolina pine from 2 to 4 ins. thick and 5 to 9 ins. wide are $18 per M. f. o. b. Norfolk, Va. On cars New York City it can be had for $21 to $22.

MAPLE FLOORING.—Prices are unchanged. Clear stock with 2-in. face is $48; No. 1 is $39.50 for 2-in.; $41.50 for 2¼-in., and $38 for 3¼-in. Factory flooring of maple ranges from $27 to $34.

OAK FLOORING.—The finest grades of red or white oak, quarter sawed flooring are $90 to $100 per M. in yard New York. Selected, quarter sawed, is $48 to $52, and very common oak is $30.

SHINGLES.—Prices continue without change. The following figures are quoted per M. for cypress shingles New York City: No. 1 Hearts, 6 × 18-in., $7.50; Primes, 6 × 18-in., $6.50; No. 1 Hearts, 6 × 20-in., $10; Primes, 6 × 20-in., $8. Pine shingles, 2X clear, 6 × 18-in., are $4 and 4X best are $5.25. White cedar can be had at $5 for 16-in. Maine shingles are $3.30 to $3.60 at mill.

HEMLOCK.—There is less activity in this kind of lumber than in any other. The base price of Pennsylvania is $21, and of West Virginia is $20.50. The quotations of a month ago are repeated as follows:

Prices Per Thousand f. o. b. cars New York.

Size.	Length: 10 ft.	12 ft.	14 ft.	16 ft.
2 × 4-in.	$23.00	$21.00	$21.00	$23.00
2 × 6-in. to 2 × 10-in	21.00	21.00	21.00	18 to 20
3 × 4-in. to 12 × 12-in	21.50	21.50	22.00	19 to 21
1 × 8-in	....	18.00	18.00	18.00
1 × 10-in. & 1 × 12-in	....	18.50	18.50	18.50

PILES.—There is a good inquiry for piles. For delivery in New York prices are without change as follows: 60 to 64 ft., $7; 65 to 69 ft., $8; 70 to 74 ft., $9.50; 75 to 79 ft., $11; 80 ft. and longer, $14.

In Norfolk the following prices are named for carload lots of yellow pine piles, in cts. per lin. ft.: 40 to 50 ft. long, 12-in. butt, 7 cts.; 14-in. butt, 9 cts.; 50 to 60 ft. long, 12-in. butt, 8 cts.; 14-in. butt, 9 cts.; 60 to 70 ft. long, 14-in. butt, 10 cts.

Creosoted piles, with 8-in. butt are 16 cts. per lin. ft., 14-in. butt, 26 cts., and 18-in. butt, 34 cts.

Oak piles with 14-in. butt, 40 ft. long are $7.50 to $8; 50-ft. long $11 to $11.50, and 60 ft. long are $14.50 to $15.

CROSS TIES.—While prices are steady it is admitted that the buying has been much less than expected. Prices f. o. b. New York are as follows:

	Cts. each.
7 × 9-in.—8 ft. 6 ins.	83 to 84
7 × 8-in.—8 ft. 6 ins.	78 to 79
7 × 9-in.—8 ft.	81 to 82
6 × 9-in.—8 ft.	77 to 78
6 × 8-in.—8 ft.	71 to 72

POLES.—See Line Construction.

LATH.—Prices are firmer in New York, but have again declined in Boston. Eastern spruce slab lath in New York are $3.75 to $3.90. In Boston, 1⅝-in. are $3.60 to $3.75, and 1½-in., $3.35 to $3.45.

SIDING.—Heart faced yellow pine siding is $32 to $34. Kiln dried sap siding can be had at $28 to $30.

GUM.—The outside prices of first quality is $1 higher. For carload lots, loaded on cars f. o. b. Ohio River points quotations are as follows: Red Gum is $33 to $35 for first quality boards and $21 to $23 for common ones.

Sap gum, firsts and seconds, is $21 to $23 for boards less than 12 ins. wide. Common sap gum is $16 to $18.

HICKORY.—The demand continues good and prices are unchanged and steady. For prime pieces, 1 to 2 ins. thick, wider than 4 ins., $50 to $66; 2¼ to 4 ins. thick, wider than 4 ins., $72 to $80; No. 1 common, 1 to 2 ins. thick, wider than 3 ins., $30 to $40; 2¼ to 4 ins. thick, wider than 3 ins., $45 to $55.

BLACK WALNUT.—Trade is fair. Prime stuff 1 to 2 ins. thick and over 6 ins. wide, is held at $95 to $115 per M.; No. 1 common, 1 to 2 ins. thick and over 4 ins. wide, commands $52 to $65.

MAHOGANY.—Prices of mahogany are unchanged. The best grade of Mexican is $150; second grade, $100 to $110. Cuban is sold at $175.

CHERRY.—The best grade of material, 1 to 2 ins. thick and wider than 6 ins., sells at $90 to $100; No. 1 common, 1 to 2 ins. thick and wider than 4 ins., is sold at $52 to $60.

BOX BOARDS.—White pine box boards are selling at $27.50 to $28.50 per thousand in carload lots. This includes the standard widths up to 10 ins. A common variety of box board sells at $24.50 to $25.

WHITE PINE.—The finest grades of white pine, "Uppers" used as pattern stock, range from $100 to $110, from yard, for 1 to 2-in. thick. For carload lots of one grade concessions of about $5 a thousand would be made. Yard prices for 2 to 3-in. pieces are $105 to $115, and 4-in. pieces are held at $115 to $120 and higher. White pine classed "Selects" is from $5 to $10 per thousand cheaper.

MILL PRICES, FOR CARLOAD LOTS AT OHIO RIVER POINTS.

YELLOW POPLAR, ROUGH.

Thickness.	Classification and Width: Prime, 8-in. and over	Common, 4-in. and over.
1-in.	$54 to $58	$35 to $36
1½—2-in.	55 to 58	55 to 38
3-in.	60 to 64	....
4-in.	62 to 67	....

Poplar squares, 3 × 3-in., 4 × 4-in., 5 × 5-in., 6 × 6-in., and 7 × 7-in., of good quality, are $62 to $67; 8 × 8-in. and larger, where obtainable, are $72 to $77 per M.

CHESTNUT.

Thickness.	Classification and Width: A 1 6-in. and wider.	Sound, Wormy. 3-in. and wider.
1-in.	$48 to $52	$17.50 to $19
1½-in.	45 to 47	19.50 to 21
2-in.	46 to 48	20.50 to 22

WHITE ASH.

Thickness.	Classification and Width: A 1, 5-in. and over.	Common, 3-in. and over.
1-in.	$48 to $49	$30 to $33
1½—2-in.	53 to 56	31 to 33
2½—3-in.	65 to 70	40 to 45
4-in.	70 to 75	40 to 45

Cull boards are $20 to $22 and planks $23 to $25.

WHITE OAK.

Thickness.	Classification and Width: A 1, 6-in. and over.	Common, 3-in. and over.
1-in.	$47 to $50	$30 to $32
1½—2-in.	52 to 53	34 to 35

Cull boards are $20; plank, from $21 to $22.

Quartered oak is from 50 to 66⅔% advance over plain.

FREIGHT RATES.—In the following list the carload freight rates on lumber, per 100 lbs., from Ohio River points to the principal cities are as follows: Baltimore, 16 cts.; Boston, 21 cts.; Buffalo, 10 cts.; Cleveland, 10 cts.; Detroit, 10 cts.; Indianapolis, 7 cts.; New York City, 19 cts.; Philadelphia, 17 cts.; Pittsburg, 10 cts.; Syracuse, 14 cts.; Toledo, 9 cts. From Norfolk, Va., to New York, 13 cts.; Boston, 15 cts. From Detroit, Mich., to New York, 19½ cts.; to Philadelphia, 17½ cts.

METALS.

COPPER.—The market has been less satisfactory and although prices have not declined appreciably, new low records have been made for the current year. Sales of electrolytic to foreign consumers have been made as low as 12.12¼ cts., and domestic consumers have been able to purchase electrolytic at approximately 12.25 cts. The market closed the month slightly firmer, but there has been on especial animation. Domestic consumers have purchased freely at various times, and the deliveries during the month of June will probably be somewhat over 100,000,000 lbs. Domestic deliveries will equal at least 60,000,000 lbs.

The most unsatisfactory thing regarding the entire copper situation is the fact that European consumers have not purchased more freely at these low prices. There is a surplus in the United States from our own domestic consumption, amounting to nearly 20,000 tons monthly. While we have exported approximately this amount to Europe during the first five months of this year, the imports of copper to this country have been large, and in June they almost equalled the exports. This simply means that to the already large stocks of copper in the hands of producers at the first of the year we have added anywhere from 10,000 to 20,000 tons monthly since that time. Consumption is larger than ever before, but the production far exceeds consumption.

SPELTER.—The grades of spelter used by manufacturers of brass, particularly rolled and sheet brass, are especially active and it is difficult in some cases to supply the demand with the promptness desired by consumers. Western producers are asking 5.05 cts. for prime Western spelter in St. Louis, which, with the 15-ct. freight rate to New York, would indicate a price of 5.20 cts. there. At present, however, there is only little spelter in the New York market and, for that, the holders are asking 5.50 cts.

PIG TIN.—Price of tin have advanced moderately during the month, due to the enormous takings by the manufacturers of tin plate. Shipments from New York to the interior during the month of June were fully 5,000 tons and at the end of June this year the total visible supply throughout the world only amounted to 15,700 tons. This is a reduction of over 3,000 tons during the month. The heaviest demand from the tin plate makers is over, but it will take many months to replace this surplus at the present high ratio of consumption. Prices are steady at 33 to 33.25 cts. per lb.

ROOFING COPPER.—The rollers of roofing copper are busily engaged finishing old contracts and have plenty of work coming in on new contracts. Prices are not at all firm, but 18 cts. is the general base price.

LEAD.—Considerable lead was purchased by various interests during the month of June, but not enough to stimulate the market to any extent. Prices of lead are not as low in proportion as those of other metals. This may be partially explained by the fact that there is more white lead being used this year than ever before.

SHEET LEAD.—Prices are without change, large consumers and jobbers buying sheet lead at 6.25 cts., while small consumers are paying 6.75 cts.

LEAD PIPE.—Larger consumers are paying 5.75 cts. per lb. and small consumers 6.40 cts.

MISCELLANEOUS METALS.—Small lots of metals and metal products can be obtained from jobbers' stores New York at the following prices:

	per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
½-in.	.19
¾ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass, sheets	.14½
Brass, rods	.14½
Solder, ½ and ½ guaranteed	.22
Zinc sheets	.08½
Manganese bronze rods	.16
Manganese bronze in crucible form	.14
Monel metal, ingot	.16

OLD METALS.—Prices have again declined. Miscellaneous lots of scrap metal amounting to about a ton can be sold to dealers in New York at about the following prices:

	Cts. per lb.
Copper, heavy and crucible	10.25 to 10.50
Copper, heavy and wire	10.00 to 10.25
Copper, light and bottoms	9.00 to 9.25
Brass, heavy	6.75 to 7.00
Brass, light	5.50 to 5.75
Heavy machine composition	9.25 to 9.50
Clean brass turnings	6.75 to 7.00
Compostion turnings	8.00 to 8.25
Lead, heavy	... to 3.50
Lead, tea	... to 3.25
Zinc, scrap	... to 3.75

OILS AND PAINTS.

PETROLEUM PRODUCTS.—The demand for all kinds of petroleum products, although excellent, is not sufficent to take care of the enormous supply now coming on the market. Prices have receded again this month, the decline being general all along the line. This is the first noteworthy redution made in the price of any oil, except Pennsylvania, this year. The Standard Oil Co. quotes the price of crude oil in bbls. at the wells as follows: Pennsylvania, Second sand and Tiona, $1.30; Mercer black, 87 cts.; Corning, 77 cts.; New Castle, 94 cts.; Indiana, 77 cts.; Illinois is unchanged at 60 cts., Illinois heavy, below 30 gravity, is 52 cts.; Kansas heavy is 30 cts. per bbl. In the New York market petroleum from tank wagon is 1 ct. per gal. lower at 7½ cts.

Auto naphtha and stove gasoline is unchanged from last month at 14¾ cts.

Fuel oil is slightly cheaper. In tank cars on track at Seaboard points it is 93 cts. to $1.03 per bbl.

LINSEED OIL.—The price of oil has fluctuated within narrow limits during the month, but quotations are now lower. It is evident that there is quite a surplus of oil held by strong hands, and some in the trade believe that there is too much being carried to permit of selling at the present figures. The prospects are that a fair crop of flaxseed will be harvested, and this should send prices down as soon as the new seed is on the market. On June 10, the principal seller of flaxseed reduced its quotation 4 cts. per gal., or to 78 to 79 cts. On June 22 prices advanced 1 ct., and city oil is now quoted at 79 to 80 cts. per gal., and out of town raw 78 to 79 cts. Calcutta oil is unchanged at 90 cts.

SPIRITS TURPENTINE.—Receipts at primary points are heavy and there is more turpentine coming on the market than for many weeks. The Southern producers experienced considerable difficulty early in the year, because of the continued wet weather, but now conditions are much more favorable. Prices have declined and spirits in 5 bbl. lots can be had at 61½ to 62 cts. per gal., in New York. In Savannah, Ga., the price is 58 to 59 cts., and in Charleston, S. C., it is 59 cts.

PAINTS.—Less activity has been noted in the paint trade during the last month than earlier in the year, still there is a very fair demand and the high cost of linseed oil has not deterred painting operations to any marked degree. It must be remembered, however, that notwithstanding the high price of oil, white lead is comparatively cheap.

Prices of white lead in oil are unchanged. For lots of 500 lbs. or over, in 100, 250 and 500-lb. kegs, 7¼ cts. per lb. is quoted, in 25 and 50-lb. kegs, 7½ cts. per lb. Red lead and litharge in bbls., half bbls. and 100-lb. kegs is 7¼ cts. per lb.

Brown metallic is quoted at $16.50 to $22 per ton; red metallic, $14 to $18 per ton. American Venetian red in ton lots or larger is 75 cts. to $1.25 per 100 lbs. and English Venetian red, $1.15 to $1.60 per 100 lbs. Graphite bridge paints are in excellent demand at prices ranging from $1.10 to $1.25 for standard brands. It is rumored that prices might work higher later in the season. Hydrex preservative paint is 75 cts. per gal., in barrel lots, New York City.

Colors in oil are quoted at the following prices per pound: Lampblack, 12 to 14 cts.; Chinese blue, 36 to 46 cts., Prussian blue, 32 to 36 cts., Vandyke brown, 11 to 14 cts., Chrome green, 12 to 16 cts. Burnt or Raw Sienna, 12 to 15 cts.

LINE CONSTRUCTION.

TELEGRAPH WIRE.—The demand is good. Prices are steady and without change. For lots of fair size, the wire measured, in Birmingham wire gage, the prices in cts. per lb. are as follows: "Extra Best Best," Nos. 6 to 9, 4⅜ cts.; Nos. 10 and 11, 4½ cts.; No. 12, 4⅝ cts.; No. 14, 5⅛ cts. "Best Best," Nos. 6 to 9, 3¼ cts.; Nos. 10 and 11, 3⅜ cts.; No. 12, 3½ cts.; No. 14, 4 cts. Actual freight is allowed from Trenton, N. J., when it does not exceed 25 cts. per 100 lbs.

COPPER WIRE.—Business is more active than at any time since 1907. The present low prices, ½ ct. lower than last month, are stimulating consumption. The base price, No. 8 wire, is now 13.75 cts. Grooved trolley wire is held at an advance of 0.25 cts. per lb. over the base price. A more comprehensive statement of conditions in the copper market will be found in the review of that market under the heading "Metals."

ALUMINUM.—Trade is quiet. Prices are without change at 31 cts. base.

INSULATORS.—The demand is fair and prices are without change. Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat, 20 oz., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $[illegible]; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $90.75.

POLES.—Prices continue without change. White cedar poles f. o. b. Rex, Mich., freight rate to Chicago 12 cts., are quoted by the Backus-Judd Lumber & Cooperage Co., Minneapolis, Minn., as follows:

Length in feet.	Diameter at top— 5-in.	6-in.	7-in.
25	$0.60	$1.00	$1.50
30	....	1.55	3.50
35	....	3.75	5.00
40	....	5.25	7.00
45	....	7.25	9.50
50	....	10.00	11.00

Cedar poles shipped from the state of Washington are quoted by R. E. Dowie Pole Company, 432 New York Block, Seattle, Wash., as follows:

Length in feet.	Diameter at top.	Price each.
30	8-in.	$2.40
35	8-in.	2.80
40	8-in.	3.20
45	9-in.	4.50
50	9-in.	5.00
55	9-in.	5.50
60	9-in.	6.00
65	9-in.	9.75
70	9-in.	10.50
75	9-in.	11.25
80	9-in.	12.00

Chestnut poles, f. o. b. Mechanicsville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price, each. Diameter at top— 5-in.	6-in.	7-in.
25	$1.50	$2.00	$2.75
30	2.50	2.75	3.25
35	2.75	3.25	4.00
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

FIR CROSS ARMS.—Prices are unchanged and are as follows:

Size, 3¼ × 4¼ in.	Price per arm in cts. Pacific Coast.	Chicago.	New York.
3 ft., 2-pin	8	13½	15½
4 ft., 4-pin	11	18½	21
5 ft., 4-pin	16	26½	28½
6 ft., 4 and 6-pin	20½	31½	36
8 ft., 6 and 8-pin	28	43	48½
10 ft., 8, 10 and 12-pin	37	55½	67½

DRAFT ANIMALS.

HORSES.—The demand for horses is far from satisfactory. While it is true that prices are nearly as high as they were in the Spring, still there is little buying, contractors and other large buyers of horses preferring to await developments rather than pay the prevailing figures. In the auction market business has been much duller, and prices have sagged off appreciably. It is felt that during the present month there will be a decided slump in values. The leading horse dealers in New York having plenty of horses weighing from 1,500 to 1,600 lbs., six years old, to sell at $250 to $275. A matched pair that would weigh at least 2,700 lbs. was offered at $500. Light delivery horses are apparently as high priced as ever, being quoted at $250 to $300. Express horses, 1,200 lbs. clean limbed animals, suitable for city work, are $225 to $250. In the auction market a seven year old horse 15 hands high, slightly under weight, guaranteed to be sound and good wind, sold at $150. One five years old, weighing 1,000 lbs., 14½ hands high, guaranteed sound and good wind, was knocked down at $115. A rather light delivery horse, five years old, apparently full of spirit, guaranteed sound and good wind, sold at $90. Three months ago such horses as these would have brought anywhere from $15 to $25 more in the auction ring.

In the Chicago market, dealers are complaining that during the last month prices have declined from $10 to $25 per head. Some of the regular buyers who ship from Chicago each week are not buying anything. Quotations in Chicago are approximately as follows: Heavy drafters, $265 to $325; light drafters, 1,550 to 1,650 lbs., $240 to $315; chunky horses, 1,350 to 1,500 lbs., $200 to $265; wagon horses, 1,250 to 1,350 lbs., $150 to $240; delivery horses, light, 1,050 to 1,250 lbs., $150 to $225. Complaint is heard that for a fancy delivery horse, weighing 1,250 lbs. and of good appearance, is in extremely limited demand. These were formerly used by the larger department stores, but the automobile is making great inroads on this line. The same is true of practically all matched horses, there appearing to be little demand for matched teams.

MULES.—While the demand is fair, there is little spirit to it. Mules are somewhat cheaper and good ones can be had at $200 to $225. A matched pair for general teaming can be had at $550. There is no surplus stock now, but unless the demand improves there is likely to be.

CHEMICALS.

The following quotations are named for delivery in New York City for lots of fair size:

	Cts. per lb.
Nitric Acid, 30°	3.87½ to 4.25
Nitric Acid, 40°	4.50 to 4.87½
Sulphuric, 60°	0.90 to 1.00
Sulphuric, 66°	1.00 to 1.25
Sal Ammoniac, lump	9.25 to 9.75
Sal Ammoniac, granulated	5.87½ to 6.00
Sal Ammoniac, gray	6.00 to 6.25
Sulphur, roll	1.85 to 2.15
Sulphur, flour	2.00 to 2.40
Sulphur, flowers	2.25 to 2.60
	Per gallon.
Alcohol, grain, U. S. proof	$2.50 to $2.52
Alcohol, denatured, 5-bbl. lots	.41 to .42
Alcohol, denatured, ½ bbls	.46 to .47
Alcohol, wood, 95 to 97	.50 to .53
Alcohol, wood, purified	.80

EQUIPMENT.

CONTRACTORS' MACHINERY.—The volume of business moving in the equipment line, while not large, is fairly satisfactory. This year has been a better one than any since 1906. The number of orders is not as large as then, but at that time it was impossible to supply the demand and probably as much machinery and equipment is now being delivered as at any time in the past. Cars are fairly active, and in some cases it is difficult to obtain them with the promptness desired. The demand for steam shovels is rather quiet, but the leading makers are now making deliveries from two to four weeks after order is received. In some few cases, shovels can be shipped promptly. Light locomotives are in good demand, but they can be obtained as needed. Prices, although approximately 10% higher than last year, are still far below those ruling prior to the business depression. Road rollers and, in fact, all kinds of road-making machines, have been in very good demand from all parts of the country. Dealers making a specialty of second-hand equipment report that there is plenty of equipment that can be obtained on short notice. This is especially true of shovels. Good dinkies, however, are scarce.

ELECTRICAL SUPPLIES.—The leading manufacturers of electrical supplies are doing as large a busines as ever. This may be qualified by saying that the volume of business measured in the output of machinery is as large, although the total amount of sales in dollars falls considerably short of the previous record year. Numerous additions to the power stations of larger electric railway systems have been made this year calling for large generators. An excellent demand for small motors is in evidence, and much factory equipment has been contracted for. Makers of telephone supplies have been rushed with work, some of it being for export. A feature of the electrical business has been the large amount of machinery required for mining development, some of this being for export.

MACHINE TOOLS.—Business in the machine tool line has been more satisfactory this year than last, but it is still far below the high record set in 1906. A feature of the business which has contributed largely to keeping the plants operated full time has been the demand for automobile machinery. Manufacturers of automobiles have demanded special tools and equipment, and these have in some cases taxed the facilities of machine tool builders. Makers of standard tools, however, have found business dull. Prices are easy, and, although the market is not weak, it is essentially a buyer's market. Much second-hand equipment is for sale at comparatively low figures.

PUMPS.—Prices of Pulsometer steam pumps f. o. b New York City are as follows: The capacity given is in gallons, raised per minute to an elevation of 25 ft.

Capacity.	Net Price.
20	$67.50
60	90.00
100	135.00
180	157.50
300	202.50
425	247.50
700	360.00
1,000	450.00

MISCELLANEOUS.

PAPER.—The demand is only fair. Roofing paper is moving more freely than building, but the trade in both is below normal.

Prices are without change from last month, as follows:

Tarred Paper:	Per roll of 108 sq. ft.
Standard 2-ply, 40 lbs	$0.45
Extra heavy, 2-ply, 45 lbs	.55
Standard 3-ply, 60 lbs	.65
Extra heavy, 3-ply, 70 lbs	.75
Rosin Sized Sheathing:	Per roll of 500 sq. ft.
Light, 35 lbs.	$0.38
Medium, 30 lbs	.45
Heavy, 40 lbs	.60

PITCH.—The buying shows a considerable reduction compared with a month ago. The best grades of pitch are sold at $14 per net ton in carloads lots. Small quantities are held at $16 per net ton.

ROOFING CEMENT.—Prices are unchanged at $25 per ton for Texaco.

OAKUM.—There is a fair inquiry and prices show little change. The best grade is off ¼ ct., selling at 6¼. Other prices are as follows: U. S. Navy, 5¾ cts.; common and plumbers' oakum, 2¼ cts. per lb.

ROPE.—The advance in the price of rope culminated last month. Previous to the advance many of the jobbers and large consumers bought heavily, so there has been little inquiry, from manufacturers, this month. The highest grade of pure Manila is 9 cts.; second grade, 8½ to 9 cts.; competitive grades, 8 to 8½ cts. Pure Sisal is unchanged at 7¾ to 8 cts. for the best grade, while less desirable grades are obtainable at 6½ to 7 cts. Jute rope in commercial sizes is 5½ to 6 cts. per lb.

ROOFING SLATE.—Business is not at all active and there is more than enough stock on hand to fill all nearby requirements. The following quotations are per "square" or one hundred sq. ft. of roof surface in carload lots f. o. b. quarry stations of the size in most general use:

	Per 100 sq. ft.
Vermont, sea green	$4.00 to $4.50
Pennsylvania, Bangor Ribbon	4.00 to 4.50
Maine, Brownsville No. 1	6.00 to 7.75
Maine, Brownsville, No. 2	5.60 to 6.00
Red	10.50 to 12.25
Unfading green	4.50 to 5.00
Genuine Bangor	5.00 to 6.50

WATERPROOFING.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproofing felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal.; Hydrex compound "B," 18 cts. per gal.

Texaco waterproofing cement is $30 per ton, in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum, for waterproofing, is sold at $25 to $27 per net ton.

VAULT LIGHTS.—See Glass.

EXPLOSIVES.—Dynamite of the kind usually used by contractors, is approximately 11 to 13 cts. per lb. f. o. b. factory in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg or 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs. f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft. $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 24 ft., $9.40; 30 ft., $12; 36 ft. $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

The Isthmian Canal Commission purchased, or will purchase in 1910, about 6,125,000 lbs. of 45% dynamite at a cost of 10.60 cts.; 3,957,100 lbs. of 50% at 11.60 cts. The estimated requirements for 1911 are 8,540,000 lbs. of 45% at 11.7 cts. and 5,187,000 lbs. of 50% at 12.7 cts.

LIGHTERAGE LIMITS.—The free delivery or "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry south along the Hudson River around the Battery and north along the East and Harlem Rivers to the Jerome Ave. Bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City; points on the north and east shore of Staten Island between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

ASBESTOS.—The demand is fair and prices continue without change. Asbestos building felt and sheathing in less than ton lots is 3½ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Millboard is made in standard sheets, 40 × 40 ins., and 42 × 44 ins. It varies in thickness from 1-32 to ½-in. and in weight from 2 to 27 lbs. per sheet. The net price in 100 lbs. lots is 5 cts. per lb.

Transite, asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 × 96 ins. The prices f. o. b. factory, Nassau, N. H., are as follows:

Thickness.	Weight.	Price.
⅛-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
¼-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
⅜-inch	3 lbs.	.24
7/16-inch	3½ lbs.	.28
½-inch	4 lbs.	.32
9/16-inch	4½ lbs.	.36
⅝-inch	5 lbs.	.40
¾-inch	6 lbs.	.44
⅞-inch	7 lbs.	.48
1 inch	8 lbs.	.52
1¼ inches	10 lbs.	.56
1½ inches	12 lbs.	.64
1¾ inches	14 lbs.	.72
2 inches	16 lbs.	.80

PINE TAR.—Prices have advanced 25 cts. per bbl. during the month. Kiln is quoted at $6.25 and retort at $6. These prices are for 480-lb. bbls.

PITCH.—Prices are easier and $3.25 is quoted for bbl. of 200 lbs. gross.

RUBBER.—Prices of rubber show little change from last month. Up River Para is obtainable at $2.40 per lb. in New York. Guayale can be had at $1 per lb. Stocks in America are small, but in Europe they are unusually large, and it is the opinion freely expressed by American importers that prices are artifically maintained by the speculation in London. This, although less rampant than was earlier in the year, is still exciting. The rubber boom, so called, has partially collapsed, but there is a tremendous demand for raw rubber. The Brazilian production will probably be large, as every effort is being made to get the Indians to work in the rubber forests.

Consumption is large and the manufacturers of automobile tires are taking enormous quantities of the material, and in other lines of material as well the inquiry is large. The high price is not only stimulated in the gathering of rubber, but it has furnished an incentive to inventors to substitute other materials in the place of rubber. Should the price advance much further, which is unlikely, manufacturers of belting will not be as large consumers and the same is true of many other lines of industry.

INDUSTRIAL NOTES.

(Continued from page 10.)

AN ORDER for 100 steel motor cars has recently been placed by the Long Island Railroad. These will be used on the new extension under the East River to the Pennsylvania Terminal at 33rd St., New York City.

THE BERGER MANUFACTURING CO., of Canton, Ohio, manufacturing sheet metal products, announces changes in the personnel of its advertising staff owing to the death of Mr. Wallace, Advertising Manager. Mr. G. P. Blackiston, of Pittsburg, Pa., has been appointed Advertising Manager to succeed Mr. Wallace and will take several men from Pittsburg to serve under him in his new work at Canton.

A SHIPBUILDING and ship repair yard is contemplated at Montreal by Vickers' Sons & Maxim, of England. The plans, which have already been filed, include a floating dry dock, three berths for the repair and construction of steel vessels, machine shops and a full equipment capable of doing the heaviest kind of ship repair work. The expenditure will probably total $2,500,000. Application has been made to the Canadian Government for a subsidy.

THE MACARTHUR CONCRETE PILE & Foundation Co., 11 Pine St., New York, N. Y., have secured the contract for the foundations of a large gas tank for the New Haven Gas Light Co., New Haven, Conn. The foundation work for this tank consists of a concrete retaining wall, 470 pedestal concrete piles and a reinforced capping for the piles. The type of piling that will be used on this work consists of cast-in-place concrete piles with enlarged bases formed on their lower ends.

CONSTRUCTION WORK has been halted on the Oregon Trunk Line Railway, according to press dispatches. The San Francisco "Call" prints the following despatch from Portland, under date of June 7:

"Owing to the unstable condition of the money market in the east the Oregon Trunk line, James J. Hill's railroad into central Oregon, of which John F. Stevens, formerly head of the Panama Canal project, is president, has been compelled to cancel contracts for construction work between Madras and the Klamath Falls Indian reservation."

GARWOOD ELECTRIC CO. has appointed the Varney Electrical Supply Co., 235 South Meridian St., Indianapolis, Ind., its agent in the territory covering that portion of Indiana south of a line drawn east and west through Fort Wayne, except Bedford and within a radius of ten miles of Bedford; also that portion of Kentucky bounded on the east by a line drawn north and south through Frankfort and including Frankfort and on the west by a line drawn north and south through Henderson and including Henderson. They have also appointed the Electrical Manufacturers Sales Co., Denver, Colo., its agent in the territory covered by Colorado, Wyoming, Utah, New Mexico and eastern half of Idaho.

THE FAYETTE R. PLUMB CO., Inc., Philadelphia, Pa., has recently purchased a 13-acre tract in St. Louis, and will build a large plant for the manufacture of high-grade tools. The plant was designed and will be built by John G. Brown, Amer. Soc. C. E., 628 Witherspoon Bldg., Philadelphia. It provides separate tracts for bringing in raw material and shipping the finished product, as well as an industrial tract connected by buildings, and is arranged that as work progresses, it passes from one building to another in the same line, finally reaching the shipment department. A separate building is provided for the office force, and a special building will be constructed for the exclusive use of employees.

THE CONSTRUCTION OF cement plant No. 6 of the Universal Portland Cement Co., Buffington, Ind., has been authorized by the United States Steel Corporation and work will be started at once. This addition will have an annual capacity of 2,000,000 bbls.

In January, 1910, appropriation was authorized for the construction of the first half of this plant to have a capacity of 2,000,000 bbls., and a decision has now been made to extend the plant to its full ultimate capacity at this time, at a total cost of $4,500,000. This includes the cost of the power station at Gary, where the electric power to operate the cement plant will be generated, utilizing the waste gases from the blast furnaces.

When the plant is in full operation in May, 1911, it will be the largest single unit manufacturing Portland cement in the world, and with Cement Plants Nos. 3 and 4 of the Universal Portland Cement Co., which have been in operation for some years, at Buffington, will give a total capacity at that point of 8,000,000 bbls. per annum. With the completion of this plant the Universal Portland Cement Co. will have, including its present plant at Pittsburg, an annual output of 12,000,000 bbls., all manufactured from blast furnace slag and limestone.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 16.

BUILDINGS.

Albany, N. Y.

Sealed proposals for work at Central Islip State Hospital, Kings Park State Hospital, and Manhattan State Hospital, as described below, will be received by the State Commission in Lunacy, Capitol, Albany, N. Y., until 3 o'clock P. M., Wednesday, the 27th day of July, 1910, when they will be opened and read publicly.

For Central Islip State Hospital, Central Islip, L. I., N. Y., kitchen and dining room building, conduits, steam mains, feeder cables and outside sewer and water connections for new group, additional boiler capacity, North Colony, construction including heating, plumbing and electric work.

For Kings Park State Hospital, Kings Park, L. I., N. Y., kitchen and dining room building, conduits, steam mains, feeder cables, sewer and water connections for new groups, construction including heating, plumbing and electric work.

For Manhattan State Hospital, Ward's Island, New York City, kitchen building, steam mains and feeder cables for new cottages, construction including heating, plumbing and electric work.

Proposals shall be accompanied by certified checks as follows:

For work at Central Islip State Hospital $3,500
For work at Kings Park State Hospital $4,000
For work at Manhattan State Hospital $1,250

Contractors to whom the awards are made will be required to furnish surety company bonds within 30 days after official notice of award of contract, in accordance with the specifications, in the following amounts:

For work at Central Islip State Hospital $35,000
For work at Kings Park State Hospital $40,000
For work at Manhattan State Hospital $12,500

Drawings and specifications may be consulted and blank forms of proposals obtained at the institution for which the work is advertised; or for all the work at the office of the State Commission in Lunacy, 1 Madison Avenue, New York City, and at the office of the State Architect. Complete sets of plans and specifications for the work at each institution, or for all work, will be furnished to prospective bidders provided application for same is received before the 23rd day of July by the State Architect, Franklin B. Ware, Albany, N. Y.

T. E. McGARR, Secretary,
State Commission in Lunacy.
Dated July 2nd, 1910.

PAVEMENT.

Amarillo, Tex.

Sealed bids will be received at the office of the undersigned until 3 o'clock P. M., 25th day of July, A. D. 1910, for the construction of approximately 80,000 square yards of pavement. Each bidder shall bid separately on

(a) Bitulithic paving.
(b) Vitrified brick paving.
(c) Sheet Asphalt.
(d) Rock Asphalt.

Each bid must be accompanied by a certified check for $1,000, payable to the City Treasurer of Amarillo, Texas. The City reserves the right to reject any and all bids.

Plans and specifications on file at office of the City Secretary, Amarillo, Texas, and E. L. Dalton, Engineer, Dallas, Texas.

SAM J. BROWN,
City Secretary.

Extra copies of the specifications to be sent out of town for personal use of bidders may be secured from the engineer upon remittance of $5.00.

PAVING.

Caldwell, Ohio.

Sealed bids will be received up to 12 o'clock noon, July 22, at the office of the Village Clerk, for paving, approximate quantities as follows:

7,750 sq. yds. paving, 4,500 feet curb.

A certified check for $300 to accompany bid. HUGH, F. NEUHART,
Village Clerk.

BRIDGE AND VIADUCT.

Fort Dodge, Iowa, July 1, 1910.

Notice is hereby given that sealed proposals will be opened and read at the office of the City Clerk of the City of Fort Dodge, Iowa, until the 22d day of August, 1910, at 7.30 P. M., for taking down in good order the old steel bridge superstructure on Farley Street, across the Des Moines River at that point old material to be deposited under direction of City Engineer at any point within 200 ft. of river bank, furnishing all labor and materials, and erecting ready for travel the new steel bridge superstructure (length 330 ft.) and a metal viaduct (length 823 ft.) substructure and superstructure complete.

Complete plans and specifications may be seen at the office of the City Engineer. Copies of plans and specifications may be obtained of the City Engineer upon making a deposit of Twenty Dollars ($20.00), said deposit to be returned upon return of the plans and specifications.

All proposals must state time in which work will be commenced and completed. Each proposal must be accompanied by a certified check of Three Thousand Dollars ($3,000.00) made payable to the order of the City Treasurer of Fort Dodge, Iowa, to be forfeited to the City of Fort Dodge as liquidated damages in case of failure of bidder to enter into contract for the execution of the work, and furnish a satisfactory surety bond of (50) per cent. of the contract price for the faithful performance of the work. The certified check to be returned to bidder as soon as satisfactory contract is executed and to the unsuccessful bidder when the award of contract is made.

The person or persons to whom contract may be awarded will be required to execute the contract with sureties within ten (10) days from date of service of notice to that effect.

Bidders must acquaint themselves with the plans, drawings and specifications for the work, and by personal examination satisfy themselves of the nature, character and location of the proposed work, that no misunderstanding may arise in regard to the character and quantity of the work.

No information derived from maps, profiles, plans, specifications or from the Engineer or his assistants, shall in any way relieve the contractor from any risk, or from fulfilling any and all of the terms of the contract and specifications.

The blank form of proposal attached to the specifications shall be used in making out bid. The price must be written in the proposal and also stated in figures, and any proposal not in accordance with these instructions or not on the blank furnished will be rejected. If any discrepancies occur between the written and figured prices, those most favorable to the City of Fort Dodge, Iowa, will be taken as the intention of the bidder.

The right is reserved to reject any or all bids.

S. J. BENNETT,
Mayor.

W. L. TANG,
City Clerk.

DREDGING.

COMMONWEALTH OF MASSACHUSETTS.—Board of Harbor and Land Commissioners, State House, Boston, July 1, 1910.—Sealed bids or proposals for improving the entrance to Cotuit harbor in the town of Barnstable, will be received at the office of the Board of Harbor and Land Commissioners, Room 131, State House, Boston, Mass., until 2 o'clock P. M., Friday, July 15, 1910, and then and there will be publicly opened and read. The work to be done is the dredging of about 92,000 cubic yards of material from the channel at the entrance to Cotuit harbor, so that it shall be 6 feet deep at mean low water and 200 feet wide on the bottom. All proposals must be made upon blank forms, which, together with information in regard to the work may be obtained at the office of the Board, where plans and specifications may be seen. Each bidder will be required to give to the Board satisfactory assurance of his competency, experience and responsibility. The right is reserved to reject any and all bids and to waive any defect or informality at the discretion of the Board. GEORGE E. SMITH, SAMUEL M. MANSFIELD, HEMAN A. HARDING, Harbor and Land Commissioners. FRANK W. HODGDON, Chief Engineer.

ROAD IMPROVEMENTS.

White Plains, N. Y.

Sealed proposals will be received by the Town Board of the Town of White Plains, Westchester County, N. Y., at the office of the Town Clerk, in the Village of White Plains, until 1.30 o'clock P. M. on the 21st day of July, 1910, when they will be opened.

For Macadamizing, Grading and otherwise improving the following Roads or Highways: Wards Lane, from North Street to Westchester Avenue, a distance of about 1,160 feet; Sound View Avenue, from a point near the residence of John Miles to Old Mamaroneck Road, a distance of about 1,500 feet; Hartsdale Avenue, from Old Mamaroneck Road to the Scarsdale Town Line, a distance of about 3,100 feet; Purdy Avenue, from the Harrison Town Line to Scarsdale Town Line, a distance of about 5,050 feet; also the two ends of Gedney Way, from Mamaroneck Avenue westerly to proposed fill of the N. Y., Westchester and Boston Railroad Co., and from Old Mamaroneck Road easterly to proposed fill of the N. Y., Westchester and Boston Railroad Co., a distance of about 1,500 feet. Plans may be seen, blank forms of proposals, specifications and other necessary papers can be obtained on application at the office of Floy D. Hopkins, the Town Clerk, or at the office of B. F. Darling, the Engineer in charge, White Plains, N. Y., on and after Saturday, July 9th, 1910.

The Town Board reserves the right to reject any and all proposals or to accept any proposal or proposals, which in their judgment may be most favorable to the Town of White Plains.

FLOY D. HOPKINS,
Town Clerk.

Dated White Plains, N. Y., June 30th, 1910.

By order of the Town Board.

BRIDGE FLOORING.

Berwick, Pa.

Sealed proposals for a permanent floor on the Berwick-Nescopeck Bridge, across the Susquehanna River at Berwick, Pa., will be received by the Board of Commissioners of Columbia County and the County Controller of Luzerne County up to 11:00 o'clock A. M., 19th day of July, 1910, and will be opened at 11:00 o'clock A. M., 19th day of July, 1910.

Bids to be submitted and addressed in duplicate, one to the Commissioners of Columbia County, Bloomsburg, Pa., and one to the County Controller of Luzerne County, Wilkes-Barre, Pa.

Bids to be endorsed "Proposals for floor on Berwick-Nescopeck Bridge," and accompanied by a certified check amounting to 5 per cent. of the bid.

The work to be done consists of a reinforced concrete floor, painting all steel work up to the level of the top of the floor, and the construction of a standard gauge track for electric railway.

Plans and specifications may be seen and blank form of proposals obtained from the County Commissioners of Columbia County, and the County Commissioners of Luzerne County.

The right to reject any or all bids is reserved.

C. FRED LENHART,
C. L. POHE,
JERRY A. HESS,
Commissioners of Columbia Co.
JAMES M. NORRIS,
Controller of Luzerne County.

Plans and specifications are on file in the office of Engineering News.

TEST-BORINGS.

CONTRACT 98.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M., on July 20, 1910, for Contract 98, for making test-borings expected to require casing deeper than 200 feet or to attain a total depth greater than 500 feet, aggregating about 10,000 linear feet, in the Boroughs of Manhattan and Brooklyn, New York City.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, can be obtained at the above address by depositing the sum of five dollars ($5) for each pamphlet. For further particulars see Information for Bidders.

JOHN A. BENSEL, President,
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.

DRAINAGE

Atkinson, Ill.

Sealed proposals will be received by the Commissioners of Drainage District No. 1 of the Towns of Union, Atkinson and Alba, Henry County, Illinois, until Saturday, the 23d day of July, 1910, and until three o'clock P. M. of said day, at which time the bids will be publicly opened at the residence of Mrs. Deroo, located on the southeast quarter of Section 27 in Atkinson Township, Henry County, Illinois, within the boundaries of said Drainage District. The work for which bids are desired consists of the construction of small levees and a highway grade and the cleaning out of portions of the open ditches of the District. Specifications for the work may be had upon application to the Engineer.

A. W. ALLEN,
AUGUST RUMI[illegible]
R. H. GALBRA[illegible]
Commissioners.

H. E. REEVES,
Engineer.
Atkinson, Ill., June 23, 1910.

SEWER AND SIDEWALKS.

La Follette, Tenn.

On Monday, July 25th, the Board of Public Works of La Follette, will let contracts for the construction of sewer and concrete sidewalks.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 18, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M., on the 10th day of August, 1910, and then opened, for the construction, complete, (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post Office at Decorah, Iowa, in accordance with the drawings and specification, copies of which may be obtained from the Custodian of site at Decorah, Iowa, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 27, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M., on the 9th day of August, 1910, and then opened, for the construction, complete (including plumbing, gas fitting, heating apparatus, electric conduits and wiring of the U. S. Post Office at Woburn, Mass., in accordance with drawings and specification, copies of which may be obtained from the Custodian of site at Woburn, Mass., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

DEPARTMENT OF THE INTERIOR, July 2, 1910.—Sealed proposals will be received at this Department until 2 o'clock P. M., Friday, July 22, 1910, and then opened, for the installation of two electric passenger elevators for the Pension Office Building, Washington, D. C., in accordance with specifications and drawings, copies of which may be obtained upon application to the Chief Clerk of this Department. R. A. BALLINGER, Secretary.

Situations Wanted

GRADUATE (Cornell) Civil Engineer (23), desires position in construction work; highest references. Address "S. A. 1," Engineering News, New York. 1-1t

Situations Open

WANTED—Structural Draftsman, college graduate with some experience in design of railway bridges and masonry; good letterer. State age, education and experience in detail and enclose sample of work. Salary $75.00. "ENGINEER," Room 367 South Station, Boston. 1-1t

APPLICANT FOR POSITION WANTED—A high class office man. Thoroughly familiar with office work; with executive ability and able to organize. To take charge of office. One familiar with the valve and water gate business preferred. References of the highest class expected. Splendid opportunity for the right man. Address "W. A. 1," Engineering News, New York. 1-2t

Miscellaneous Wants

WANTED—To sell half interest in construction business to experienced engineer; $5,000 cash, remainder paid from profits. Purchaser to take charge of business. All construction work on commission. Address "X. A. 1," Engineering News, New York. 1-1t

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